

10/692,151

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

~~10/692,151~~

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 JUL 02 LMEDLINE coverage updated
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names
NEWS 4 JUL 02 CHEMCATS accession numbers revised
NEWS 5 JUL 02 CA/CAPLUS enhanced with utility model patents from China
NEWS 6 JUL 16 CAPLUS enhanced with French and German abstracts
NEWS 7 JUL 18 CA/CAPLUS patent coverage enhanced
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 9 JUL 30 USGENE now available on STN
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 11 AUG 06 BEILSTEIN updated with new compounds
NEWS 12 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 13 AUG 13 CA/CAPLUS enhanced with additional kind codes for granted patents
NEWS 14 AUG 20 CA/CAPLUS enhanced with CAS indexing in pre-1907 records
NEWS 15 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 16 AUG 27 USPATOLD now available on STN
NEWS 17 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 18 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 19 SEP 13 FORIS renamed to SOFIS
NEWS 20 SEP 13 INPADOCDB enhanced with monthly SDI frequency
NEWS 21 SEP 17 CA/CAPLUS enhanced with printed CA page images from 1967-1998
NEWS 22 SEP 17 CAPLUS coverage extended to include traditional medicine patents

NEWS EXPRESS 05 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 05 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

*PROMT - PROMT from 1978 - present

* The files listed above are temporarily unavailable.

FILE 'HOME' ENTERED AT 08:22:22 ON 19 SEP 2007

=> s [KNT][HPN][AV][HQ]YWT[HQ]MFY[ST]/SQSP

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

1.05

1.05

FILE 'REGISTRY' ENTERED AT 08:25:32 ON 19 SEP 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 18 SEP 2007 HIGHEST RN 947490-11-1

DICTIONARY FILE UPDATES: 18 SEP 2007 HIGHEST RN 947490-11-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> s [KNT][HPN][AV][HQ]YWT[HQ]MFY[ST]/SQSP

L1 11 [KNT][HPN][AV][HQ]YWT[HQ]MFY[ST]/SQSP

=> d L1 ibib abs hitstr tot

'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN

SAM - Index Name, MF, and structure - no RN

FIDE - All substance data, except sequence data

IDE - FIDE, but only 50 names

CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):END

=> D L1 CN SEQ 1-11

L1 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
CN L-Histidine, L-lysyl-L-prolyl-L-valyl-L-glutaminyL-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyL-L-methionyl-L-phenylalanyl-L-tyrosyl-L-threonylglycylglycylglycyl-L-seryl-L-alanyl-L- α -glutamyl-L-threonyl-L-valylglycylglycylglycyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 29: PN: US6747135 SEQID: 42 unclaimed sequence

SEQ 1 KPVQYWTQMF YTGGGSAETV GGGHHHHHHH
===== ==

HITS AT: 1-12

L1 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
CN L-Histidine, L-lysyl-L-histidyl-L-valyl-L-glutaminyL-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyL-L-methionyl-L-phenylalanyl-L-tyrosyl-L-serylglycylglycylglycyl-L-seryl-L-alanyl-L- α -glutamyl-L-threonyl-L-valylglycylglycylglycyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 28: PN: US6747135 SEQID: 41 unclaimed sequence

SEQ 1 KHVQYWTQMF YSGGGSAETV GGGHHHHHHH
===== ==

HITS AT: 1-12

L1 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
CN L-Histidine, L-lysyl-L-histidyl-L-valyl-L-glutaminyL-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyL-L-methionyl-L-phenylalanyl-L-tyrosyl-L-serylglycylglycylglycyl-L-seryl-L-alanyl-L- α -glutamyl-L-threonyl-L-valylglycylglycylglycyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl- (9CI)

(CA INDEX NAME)
OTHER NAMES:
CN 31: PN: WO0023463 FIGURE: 7 unclaimed sequence

SEQ 1 KHVQYWTQMF YSGGSAETV GGGHHHHH
===== ==
HITS AT: 1-12

L1 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
CN L-Serine, L-threonyl-L-histidyl-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 101: PN: WO0023463 SEQID: 21 claimed sequence
CN 126: PN: US6747135 SEQID: 21 unclaimed sequence

SEQ 1 THVQYWTQMF YS
===== ==
HITS AT: 1-12

L1 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
CN L-Serine, L-asparaginyL-L-histidyl-L-valyl-L-histidyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 100: PN: WO0023463 SEQID: 20 claimed sequence
CN 125: PN: US6747135 SEQID: 20 unclaimed sequence

SEQ 1 NHVHYWTQMF YS
===== ==
HITS AT: 1-12

L1 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
CN L-Threonine, L-lysyl-L-histidyl-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 124: PN: US6747135 SEQID: 19 unclaimed sequence
CN 99: PN: WO0023463 SEQID: 19 claimed sequence

SEQ 1 KHVQYWTQMF YT
===== ==
HITS AT: 1-12

L1 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
CN L-Threonine, L-lysyl-L-histidyl-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-histidyl-L-methionyl-L-phenylalanyl-L-tyrosyl-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 123: PN: US6747135 SEQID: 18 unclaimed sequence
CN 98: PN: WO0023463 SEQID: 18 claimed sequence

SEQ 1 KHVQYWTHMF YT
===== ==
HITS AT: 1-12

L1 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
CN L-Threonine, L-lysyl-L-asparaginyL-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 122: PN: US6747135 SEQID: 17 unclaimed sequence
CN 97: PN: WO0023463 SEQID: 17 claimed sequence

SEQ 1 KNVQYWTQMF YT
===== ==

HITS AT: 1-12

L1 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN

CN L-Serine, L-lysyl-L-prolyl-L-alanyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 121: PN: US6747135 SEQID: 16 unclaimed sequence

CN 96: PN: WO0023463 SEQID: 16 claimed sequence

SEQ 1 KPAQYWTQMF YS
===== ==

HITS AT: 1-12

L1 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN

CN L-Threonine, L-lysyl-L-prolyl-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 95: PN: WO0023463 SEQID: 15 claimed sequence

SEQ 1 KPVQYWTQMF YT
===== ==

HITS AT: 1-12

L1 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN

CN L-Serine, L-lysyl-L-histidyl-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 116: PN: US6747135 SEQID: 1 unclaimed sequence

CN 81: PN: WO0023463 SEQID: 1 claimed sequence

SEQ 1 KHVQYWTQMF YS
===== ==

HITS AT: 1-12

=> DISPLAY L1 1-11 ALL

L1 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN

RN 700846-47-5 REGISTRY

ED Entered STN: 29 Jun 2004

CN L-Histidine, L-lysyl-L-prolyl-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl-L-threonylglycylglycylglycyl-L-seryl-L-alanyl-L- α -glutamyl-L-threonyl-L-valylglycylglycylglycyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 29: PN: US6747135 SEQID: 42 unclaimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 29

PATENT ANNOTATIONS (PNTE):

Sequence |Patent

Source |Reference

=====+=====

Not Given|US6747135

|unclaimed

|SEQID 42

SEQ 1 KPVQYWTQMF YTGGGSAETV GGGHHHHHH

=====

HITS AT: 1-12

SEQ3 1 Lys-Pro-Val-Gln-Tyr-Trp-Thr-Gln-Met-Phe-

=====

11 Tyr-Thr-Gly-Gly-Gly-Ser-Ala-Glu-Thr-Val-

=====

21 Gly-Gly-Gly-His-His-His-His-His

HITS AT: 1-12

MF C145 H199 N45 O40 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

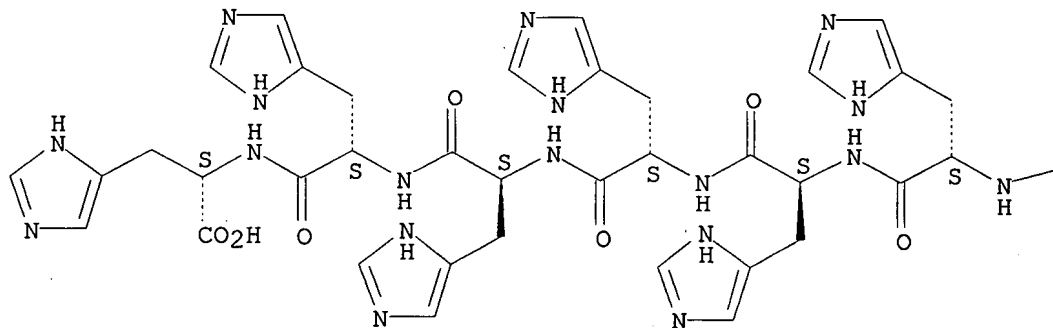
RL.P Roles from patents: PRP (Properties)

Ring System Data

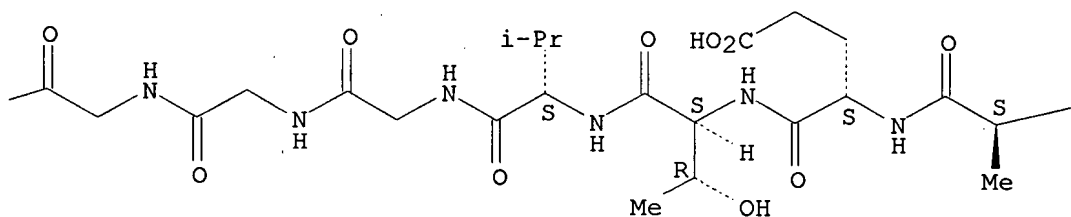
Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C4N	NC4	5	C4N	16.136.1	1
C3N2	NCNC2	5	C3N2	16.195.24	6
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

Absolute stereochemistry.

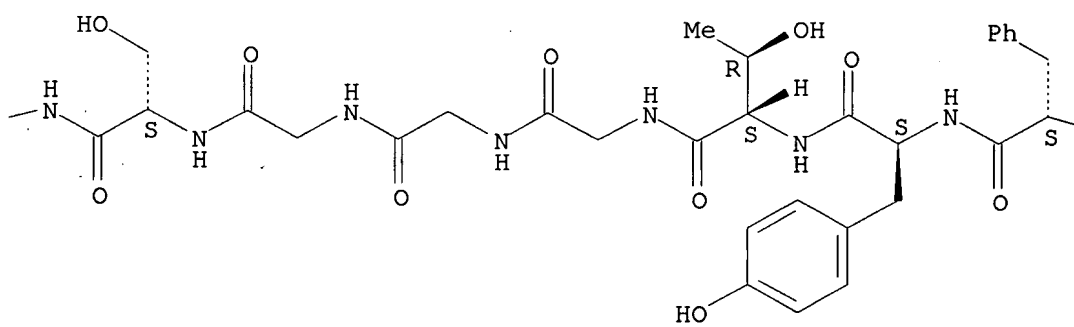
PAGE 1-A



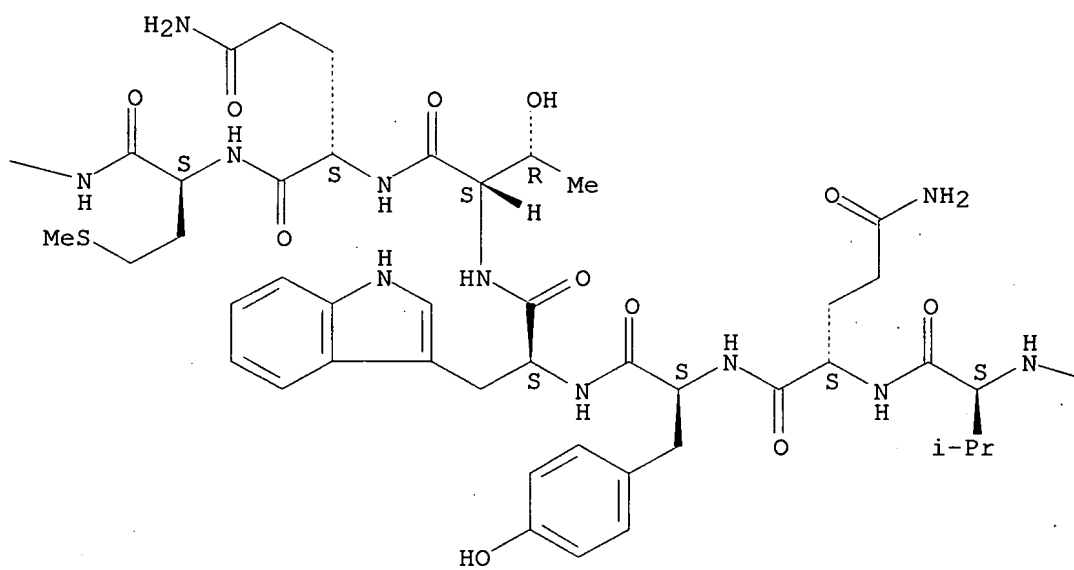
PAGE 1-B

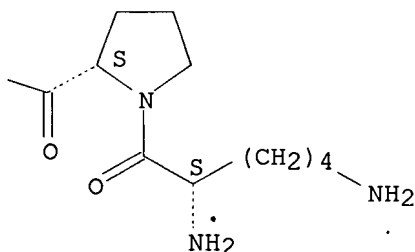


PAGE 1-C



PAGE 1-D





Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Density (DEN)	1.411+/-0.06 g/cm**3	760 Torr	(1)
Freely Rotatable Bonds (FRB)	106		(1)
H acceptors (HAC)	85		(1)
H donors (HD)	50		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	135		(1)
LOGP (LOGP)	-8.902+/-1.225	25 deg C	(1)
Molar Volume (MVOL)	2298.5+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	3244.47		(1)
Polar Surface Area (PSA)	1353.38 A**2		(1)

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.19
((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
 TI Fluorescent dye binding peptides
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13

ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide				
IT	Amino acids, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding peptides containing; fluorescent dye binding peptides)				
IT	Peptides, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding; fluorescent dye binding peptides)				
IT	Proteins				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye containing; fluorescent dye binding peptides)				
IT	Aptamers				
	(Peptide; fluorescent dye binding peptides)				
IT	Dissociation				
	Emission spectra Fluorescence Fluorescent dyes Fluorescent substances Protein sequences (fluorescent dye binding peptides)				
IT	265979-68-8P				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye complex with; fluorescent dye binding peptides)				
IT	198139-49-0DP, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Oregon Green 514; fluorescent dye binding peptides)				
IT	2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (fluorescent dye binding peptides)				
IT	700964-14-3	700964-15-4	700964-17-6	700964-18-7	
	RL: PRP (Properties) (unclaimed nucleotide sequence; fluorescent dye binding peptides)				
IT	700964-05-2	700964-06-3	700964-07-4	700964-08-5	700964-09-6
	700964-10-9	700964-11-0	700964-12-1	700964-13-2	700964-16-5
	700964-19-8	700964-20-1	700964-21-2	700964-22-3	700964-23-4
	700964-24-5	700964-25-6	700964-26-7	700964-27-8	700964-28-9
	700964-29-0	700964-30-3	700964-31-4	700964-32-5	700964-33-6
	700964-34-7	700964-35-8	700964-36-9		
	RL: PRP (Properties) (unclaimed protein sequence; fluorescent dye binding peptides)				
IT	47070-99-5	95088-49-6	110579-95-8	113965-79-0, 6-11-Peptide (hydra head-activator)	115084-19-0 119766-62-0 130094-09-6 135941-52-5
	206750-67-6	211555-82-7	245759-07-3	246862-96-4	246862-97-5
	246862-98-6	246862-99-7	246863-00-3	246863-03-6	246863-04-7
	246863-05-8	246863-06-9	246863-07-0	246863-08-1	260055-30-9
	265979-53-1	265979-54-2	265979-55-3	265979-56-4	265979-58-6
	265979-59-7	265979-60-0	265979-61-1	265979-62-2	265979-63-3
	265979-64-4	265979-65-5	265979-66-6	265979-69-9	265979-70-2

265979-71-3	265979-72-4	265979-73-5	265979-74-6	265979-75-7
265979-76-8	265979-77-9	265979-78-0	265979-79-1	265979-81-5
265979-82-6	265979-83-7	265979-84-8	265979-85-9	265979-86-0
265979-87-1	265979-88-2	265979-89-3	265979-90-6	265979-92-8
265979-93-9	265979-94-0	265979-95-1	265979-96-2	265979-97-3
265979-98-4	265979-99-5	265980-00-5	265980-01-6	265980-02-7
265980-03-8	265980-04-9	265980-05-0	265980-07-2	629618-70-8
700846-44-2	700846-45-3	700846-46-4	700846-47-5	700846-48-6
700846-49-7	700846-50-0	700846-51-1	700846-52-2	700846-54-4
700846-55-5	700846-56-6	700846-65-7	700846-67-9	

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

L1 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN

RN 700846-46-4 REGISTRY

ED Entered STN: 29 Jun 2004

CN L-Histidine, L-lysyl-L-histidyl-L-valyl-L-glutamyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutamyl-L-methionyl-L-phenylalanyl-L-tyrosyl-L-serylglycylglycylglycyl-L-seryl-L-alanyl-L- α -glutamyl-L-threonyl-L-valylglycylglycylglycyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 28: PN: US6747135 SEQID: 41 unclaimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 29

PATENT ANNOTATIONS (PNTE):

Sequence |Patent

Source |Reference

=====+=====

Not Given|US6747135

|unclaimed

|SEQID 41

SEQ 1 KHVQYWTQMF YSGGSAETV GGGHHHHHH

===== ==

HITS AT: 1-12

SEQ3 1 Lys-His-Val-Gln-Tyr-Trp-Thr-Gln-Met-Phe-
 === === === === === === === === ===
 11 Tyr-Ser-Gly-Gly-Gly-Ser-Ala-Glu-Thr-Val-
 === ===
 21 Gly-Gly-Gly-His-His-His-His-His-His
 HITS AT: 1-12

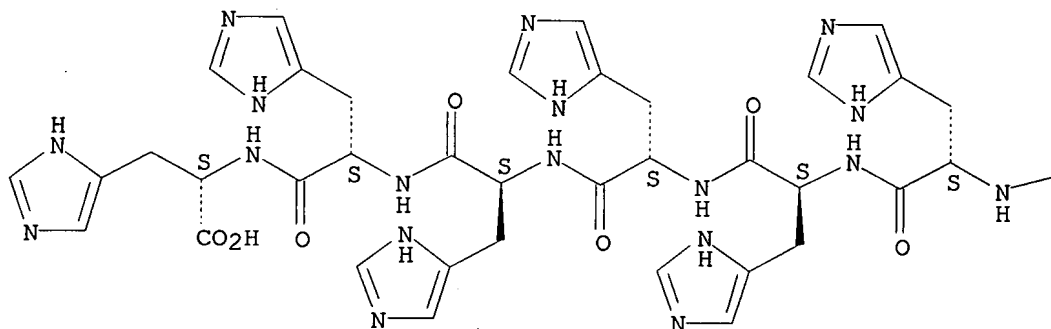
MF C145 H197 N47 O40 S
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL
 DT.CA CAPlus document type: Patent
 RL.P Roles from patents: PRP (Properties)

Ring System Data

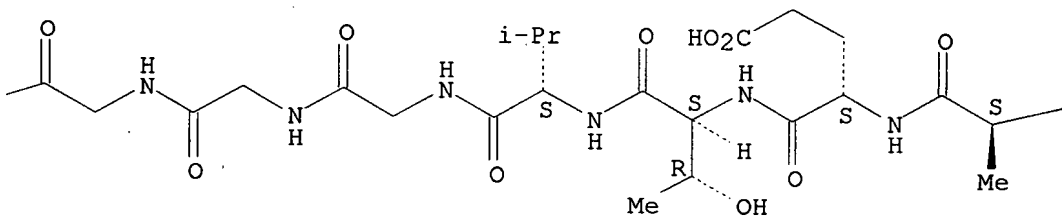
Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
=====	=====	=====	=====	=====	=====
C3N2	NCNC2	5	C3N2	16.195.24	7
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

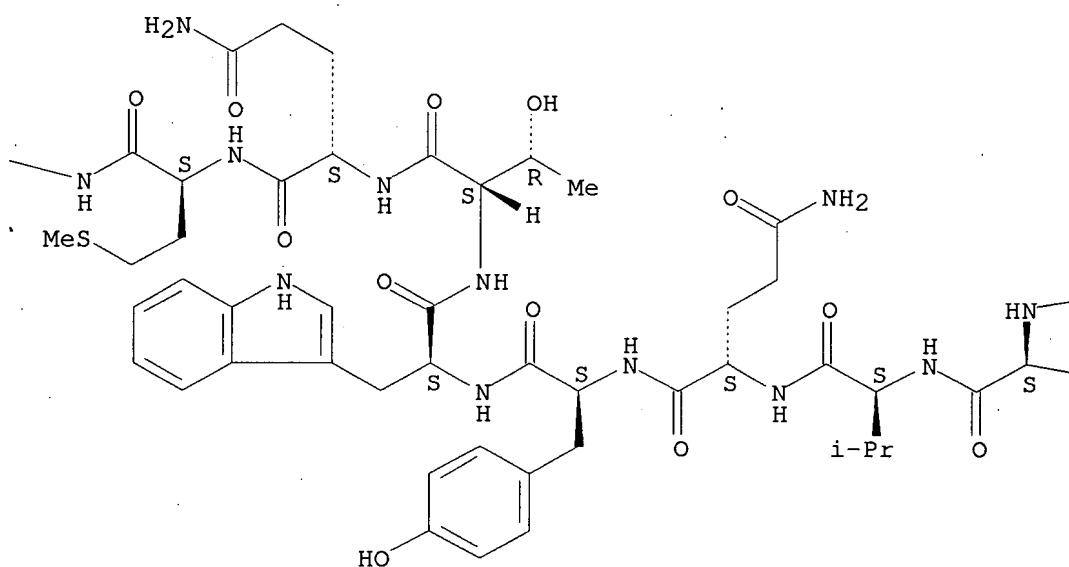
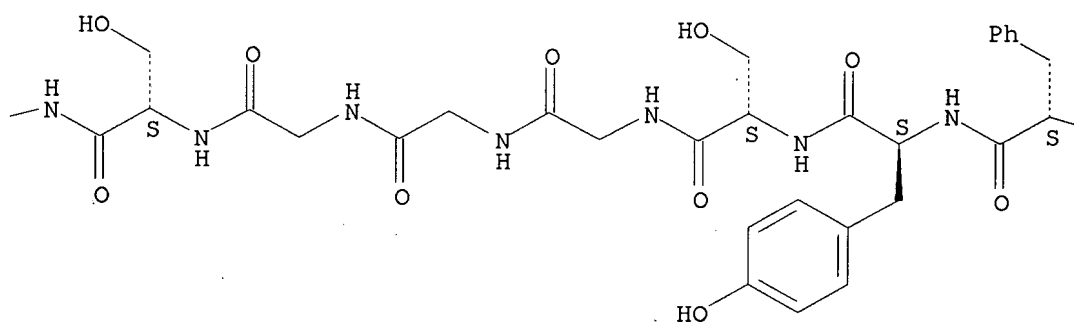
Absolute stereochemistry.

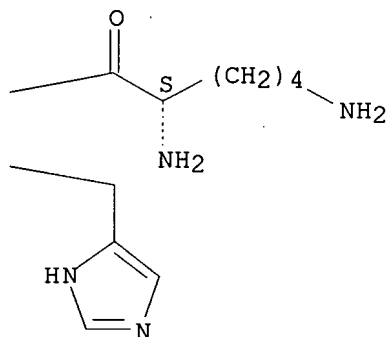
PAGE 1-A



PAGE 1-B







Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Density (DEN)	1.420+/-0.06 g/cm**3	760 Torr	(1)
Freely Rotatable Bonds (FRB)	109		(1)
H acceptors (HAC)	87		(1)
H donors (HD)	52		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	139		(1)
LOGP (LOGP)	-9.971+/-1.225	25 deg C	(1)
Molar Volume (MVOL)	2302.5+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	3270.47		(1)
Polar Surface Area (PSA)	1390.85 A**2		(1)

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.19
((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
 TI Fluorescent dye binding peptides
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13

ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide				
IT	Amino acids, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding peptides containing; fluorescent dye binding peptides)				
IT	Peptides, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding; fluorescent dye binding peptides)				
IT	Proteins				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye containing; fluorescent dye binding peptides)				
IT	Aptamers				
	(Peptide; fluorescent dye binding peptides)				
IT	Dissociation				
	Emission spectra Fluorescence Fluorescent dyes Fluorescent substances Protein sequences (fluorescent dye binding peptides)				
IT	265979-68-8P				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye complex with; fluorescent dye binding peptides)				
IT	198139-49-0DP, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Oregon Green 514; fluorescent dye binding peptides)				
IT	2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (fluorescent dye binding peptides)				
IT	700964-14-3	700964-15-4	700964-17-6	700964-18-7	
	RL: PRP (Properties) (unclaimed nucleotide sequence; fluorescent dye binding peptides)				
IT	700964-05-2	700964-06-3	700964-07-4	700964-08-5	700964-09-6
	700964-10-9	700964-11-0	700964-12-1	700964-13-2	700964-16-5
	700964-19-8	700964-20-1	700964-21-2	700964-22-3	700964-23-4
	700964-24-5	700964-25-6	700964-26-7	700964-27-8	700964-28-9
	700964-29-0	700964-30-3	700964-31-4	700964-32-5	700964-33-6
	700964-34-7	700964-35-8	700964-36-9		
	RL: PRP (Properties) (unclaimed protein sequence; fluorescent dye binding peptides)				
IT	47070-99-5	95088-49-6	110579-95-8	113965-79-0, 6-11-Peptide (hydra head-activator)	115084-19-0 119766-62-0 130094-09-6 135941-52-5
	206750-67-6	211555-82-7	245759-07-3	246862-96-4	246862-97-5
	246862-98-6	246862-99-7	246863-00-3	246863-03-6	246863-04-7
	246863-05-8	246863-06-9	246863-07-0	246863-08-1	260055-30-9
	265979-53-1	265979-54-2	265979-55-3	265979-56-4	265979-58-6
	265979-59-7	265979-60-0	265979-61-1	265979-62-2	265979-63-3
	265979-64-4	265979-65-5	265979-66-6	265979-69-9	265979-70-2

265979-71-3	265979-72-4	265979-73-5	265979-74-6	265979-75-7
265979-76-8	265979-77-9	265979-78-0	265979-79-1	265979-81-5
265979-82-6	265979-83-7	265979-84-8	265979-85-9	265979-86-0
265979-87-1	265979-88-2	265979-89-3	265979-90-6	265979-92-8
265979-93-9	265979-94-0	265979-95-1	265979-96-2	265979-97-3
265979-98-4	265979-99-5	265980-00-5	265980-01-6	265980-02-7
265980-03-8	265980-04-9	265980-05-0	265980-07-2	629618-70-8
700846-44-2	700846-45-3	700846-46-4	700846-47-5	700846-48-6
700846-49-7	700846-50-0	700846-51-1	700846-52-2	700846-54-4
700846-55-5	700846-56-6	700846-65-7	700846-67-9	

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

L1 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN

RN 265980-08-3 REGISTRY

ED Entered STN: 22 May 2000

CN L-Histidine, L-lysyl-L-histidyl-L-valyl-L-glutamyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutamyl-L-methionyl-L-phenylalanyl-L-tyrosyl-L-serylglycylglycylglycyl-L-seryl-L-alanyl-L- α -glutamyl-L-threonyl-L-valylglycylglycylglycyl-L-histidyl-L-histidyl-L-histidyl-L-histidyl- (9CI)
(CA INDEX NAME)

OTHER NAMES:

CN 31: PN: WO0023463 FIGURE: 7 unclaimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 28

PATENT ANNOTATIONS (PNTE):

Sequence | Patent

Source | Reference

=====+

Not Given|WO2000023463

|unclaimed

|FIGURE 7

SEQ 1 KHVQYWTQMF YSGGSAETV GGGHHHHH

===== ==

HITS AT: 1-12

SEQ3 1 Lys-His-Val-Gln-Tyr-Trp-Thr-Gln-Met-Phe-
 === === === === === === === === ===
 11 Tyr-Ser-Gly-Gly-Gly-Ser-Ala-Glu-Thr-Val-
 === ===
 21 Gly-Gly-Gly-His-His-His-His-His
 HITS AT: 1-12

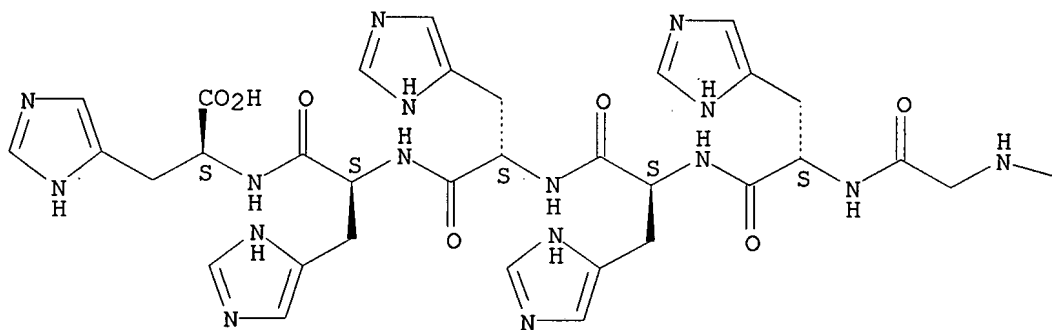
MF C139 H190 N44 O39 S
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL
 DT.CA CAplus document type: Patent
 RL.P Roles from patents: PRP (Properties)

Ring System Data

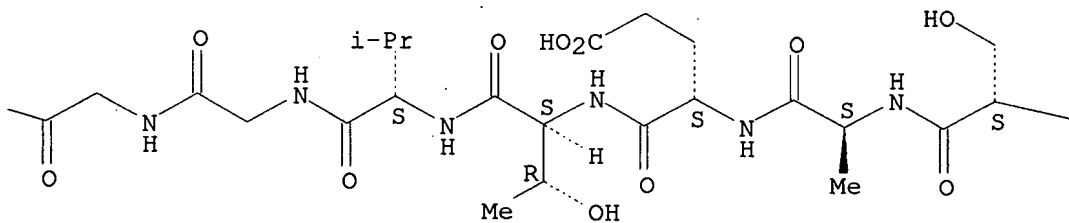
Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
=====	=====	=====	=====	=====	=====
C3N2	NCNC2	5	C3N2	16.195.24	6
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

Absolute stereochemistry.

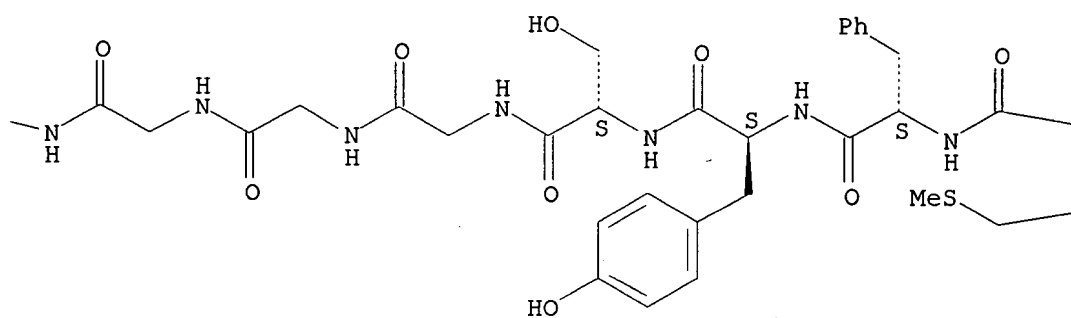
PAGE 1-A



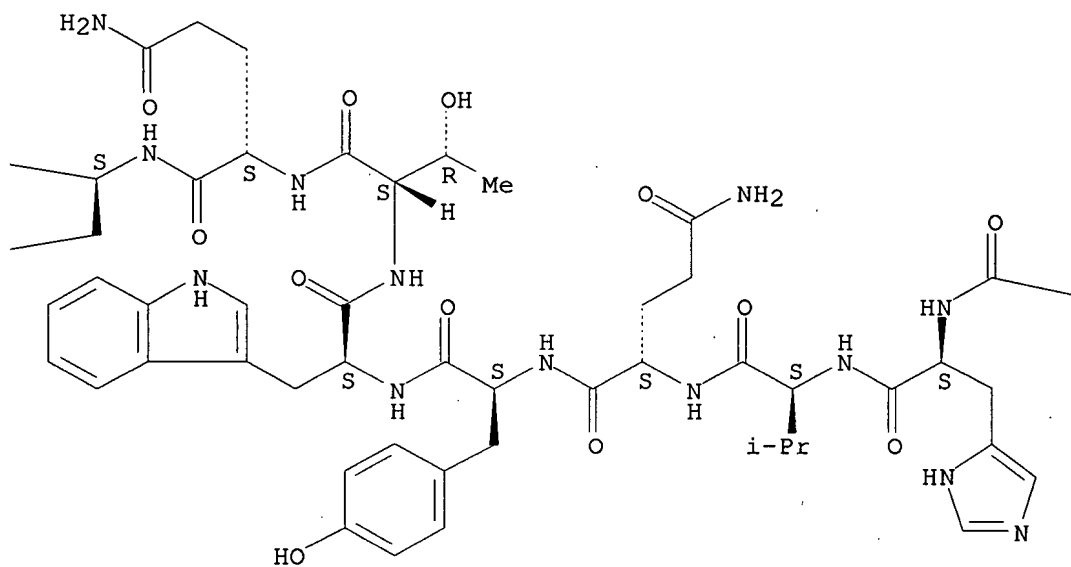
PAGE 1-B

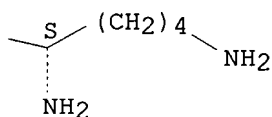


PAGE 1-C



PAGE 1-D





Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Density (DEN)	1.414+/-0.06 g/cm**3	760 Torr	(1)
Freely Rotatable Bonds (FRB)	105		(1)
H acceptors (HAC)	83		(1)
H donors (HD)	50		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	133		(1)
LOGP (LOGP)	-9.166+/-1.215	25 deg C	(1)
Molar Volume (MVOL)	2214.5+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	3133.33		(1)
Polar Surface Area (PSA)	1333.07 A**2		(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

- (1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14 ((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

- 1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 132:319524 CA
TI Fluorescent dye binding peptides for the determination of biomolecules
IN Nolan, Garry P.; Rozinov, Michael N.
PA The Board of Trustees of the Leland Stanford Junior University, USA
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K007-08

CC 9-16 (Biochemical Methods)
Section cross-reference(s): 3

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015
	WO 2000023463	A3	20000817		
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 1998-104465P 19981016

AB The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. Peptides are selected from phage display libraries using the immobilized fluorophores. Fluorophores are selected from the group of Texas Red, Rhodamine Red, Oregon Green 514, and fluorescein. The peptides find use in a variety of methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide fluorett phage library

IT Cytometry

(FACS (fluorescence-activated cell sorting); fluorescent dye binding peptides for determination of biomols.)

IT Resonance energy

(fluorescence, transfer, FRET; fluorescent dye binding peptides for determination of biomols.)

IT Biochemical molecules

Fluorescent dyes

Fluorometry

Genetic methods

Immobilization, biochemical

Phage display library

(fluorescent dye binding peptides for determination of biomols.)

IT Peptides, uses

RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)

(fluorescent dye binding peptides for determination of biomols.)

IT 2321-07-5 82354-19-6, Texas Red 99752-92-8, Rhodamine Red 178623-12-6 198139-49-0 265317-17-7 265317-40-6 265317-46-2 265317-48-4

265317-76-8 265317-77-9 265317-78-0 265317-89-3 265979-53-1

265979-54-2 265979-55-3 265979-56-4 265979-58-6 265979-59-7

265979-60-0 265979-61-1 265979-62-2 265979-63-3 265979-64-4

265979-65-5 265979-66-6 265979-67-7 265979-68-8 265979-69-9

265979-70-2 265979-71-3 265979-72-4 265979-73-5 265979-74-6

265979-75-7 265979-76-8 265979-77-9 265979-78-0 265979-79-1

265979-80-4 265979-81-5 265979-82-6 265979-83-7 265979-84-8

265979-85-9 265979-86-0 265979-87-1 265979-88-2 265979-89-3

265979-90-6 265979-91-7 265979-92-8 265979-93-9 265980-00-5

265980-01-6 265980-02-7 265980-03-8 265980-04-9 265980-05-0

265980-06-1 265981-56-4

RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)

(fluorescent dye binding peptides for determination of biomols.)

IT 266300-29-2 266300-30-5 266300-31-6 266300-32-7 266300-33-8 266300-34-9

RL: PRP (Properties)

(unclaimed nucleotide sequence; fluorescent dye binding peptides for

determination of biomols.)
IT 47070-99-5 160612-18-0 247035-66-1 247035-86-5 247037-84-9
247037-91-8 247038-72-8 247078-49-5 250640-07-4 265980-07-2
266309-30-2 266309-33-5 266309-60-8 266310-02-5
RL: PRP (Properties)

(unclaimed protein sequence; fluorescent dye binding peptides for
determination
of biomols.)

IT 7361-43-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra
head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
206750-67-6 211555-82-7 246862-96-4 246862-97-5 246862-98-6
246862-99-7 246863-00-3 246863-01-4 246863-03-6 246863-04-7
246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
265979-94-0 265979-95-1 265979-96-2 265979-97-3 265979-98-4
265979-99-5 265980-08-3 266680-72-2
RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides for determination of
biomols.)

L1 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
RN 265979-74-6 REGISTRY
ED Entered STN: 22 May 2000
CN L-Serine, L-threonyl-L-histidyl-L-valyl-L-glutaminyl-L-tyrosyl-L-
tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl-
(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 101: PN: WO0023463 SEQID: 21 claimed sequence
CN 126: PN: US6747135 SEQID: 21 unclaimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 12

PATENT ANNOTATIONS (PNTE):

Sequence |Patent
Source |Reference
=====+=====

Not Given|WO2000023463
|claimed SEQID
|21

SEQ 1 THVQYWTQMF YS
===== ==

HITS AT: 1-12

SEQ3 1 Thr-His-Val-Gln-Tyr-Trp-Thr-Gln-Met-Phe-
==== ==
11 Tyr-Ser
==== ==

HITS AT: 1-12

MF C75 H99 N17 O20 S
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAPLUS document type: Patent

RL.P Roles from patents: ANST (Analytical study); PROC (Process); PRP
(Properties); USES (Uses)

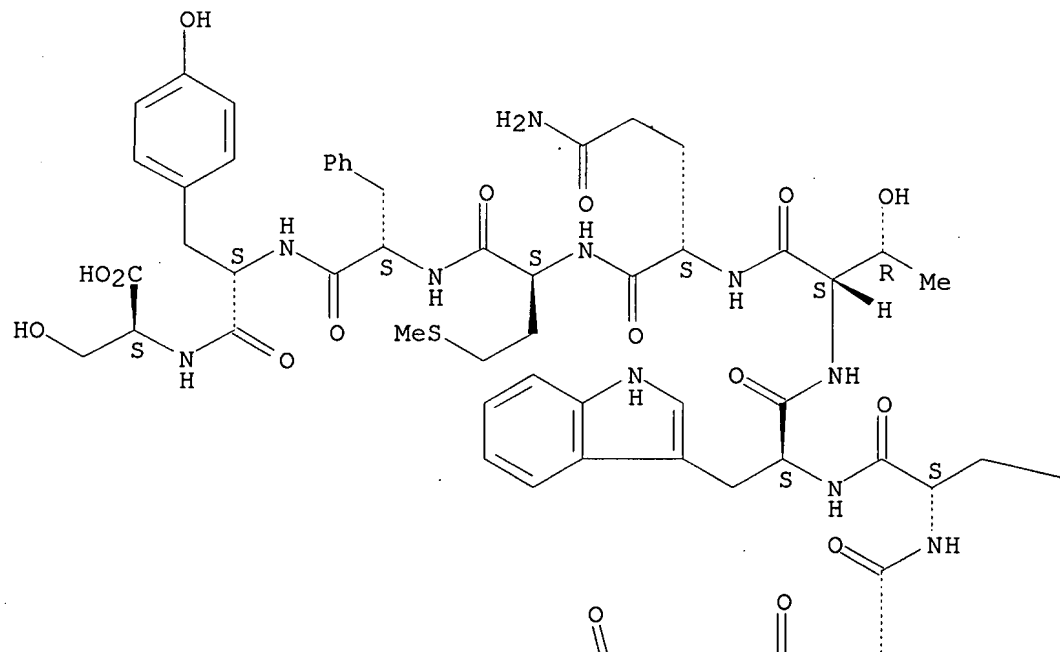
Ring System Data

Elemental	Elemental	Size of	Ring System	Ring	RID
Analysis	Sequence	the Rings	Formula	Identifier	Occurrence
EA	ES	SZ	RF	RID	Count
=====	=====	=====	=====	=====	=====

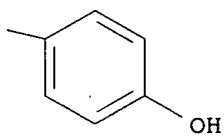
C3N2	NCNC2	5	C3N2	16.195.24	1
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	2032.0+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.383+/-0.06 g/cm**3	760 Torr	(1)
Enthalpy of Vap. (HVAP)	356.09+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	1182.7+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	52		(1)
H acceptors (HAC)	37		(1)
H donors (HD)	25		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	62		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-3.98	pH 1 25 deg C	(1)

LOGD (LOGD)	-3.88	pH 2 25 deg C	(1)
LOGD (LOGD)	-3.62	pH 3 25 deg C	(1)
LOGD (LOGD)	-3.38	pH 4 25 deg C	(1)
LOGD (LOGD)	-3.26	pH 5 25 deg C	(1)
LOGD (LOGD)	-2.91	pH 6 25 deg C	(1)
LOGD (LOGD)	-2.82	pH 7 25 deg C	(1)
LOGD (LOGD)	-3.35	pH 8 25 deg C	(1)
LOGD (LOGD)	-3.62	pH 9 25 deg C	(1)
LOGD (LOGD)	-4.19	pH 10 25 deg C	(1)
LOGP (LOGP)	0.159+/-1.035	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	1000 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	410 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	37 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	4.6 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	3.0 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	19 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	210 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	2.7 g/L	Unbuffered Water	(1)
		pH 6.43	
		25 deg C	
Molar Intrinsic Solubility (ISLB.MOL)	0.63 mol/L	25 deg C	(1)
Molar Solubility (SLB.MOL)	0.63 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.63 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.63 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.26 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.023 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0029 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0019 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.012 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.13 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.63 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0017 mol/L	Unbuffered Water	(1)
		pH 6.43	
		25 deg C	
Molar Volume (MVOL)	1149.5+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	1590.76		(1)
PKA (PKA)	3.23+/-0.10	Most Acidic	(1)
		25 deg C	
PKA (PKA)	6.69+/-0.61	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	640.52 A**2		(1)
Vapor Pressure (VP)	0 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14 ((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
 TI Fluorescent dye binding peptides
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13
 ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide				
IT	Amino acids, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding peptides containing; fluorescent dye binding peptides)				
IT	Peptides, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding; fluorescent dye binding peptides)				
IT	Proteins				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye containing; fluorescent dye binding peptides)				
IT	Aptamers				
	(Peptide; fluorescent dye binding peptides)				
IT	Dissociation				
	Emission spectra				
	Fluorescence				
	Fluorescent dyes				
	Fluorescent substances				
	Protein sequences				
	(fluorescent dye binding peptides)				
IT	265979-68-8P				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye complex with; fluorescent dye binding peptides)				
IT	198139-49-ODP, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Oregon Green 514; fluorescent dye binding peptides)				
IT	2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (fluorescent dye binding peptides)				
IT	700964-14-3	700964-15-4	700964-17-6	700964-18-7	
	RL: PRP (Properties) (unclaimed nucleotide sequence; fluorescent dye binding peptides)				
IT	700964-05-2	700964-06-3	700964-07-4	700964-08-5	700964-09-6
	700964-10-9	700964-11-0	700964-12-1	700964-13-2	700964-16-5
	700964-19-8	700964-20-1	700964-21-2	700964-22-3	700964-23-4
	700964-24-5	700964-25-6	700964-26-7	700964-27-8	700964-28-9

700964-29-0 700964-30-3 700964-31-4 700964-32-5 700964-33-6
700964-34-7 700964-35-8 700964-36-9

RL: PRP (Properties)

(unclaimed protein sequence; fluorescent dye binding peptides)

IT 47070-99-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra
head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
206750-67-6 211555-82-7 245759-07-3 246862-96-4 246862-97-5
246862-98-6 246862-99-7 246863-00-3 246863-03-6 246863-04-7
246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
265979-53-1 265979-54-2 265979-55-3 265979-56-4 265979-58-6
265979-59-7 265979-60-0 265979-61-1 265979-62-2 265979-63-3
265979-64-4 265979-65-5 265979-66-6 265979-69-9 265979-70-2
265979-71-3 265979-72-4 265979-73-5 265979-74-6 265979-75-7
265979-76-8 265979-77-9 265979-78-0 265979-79-1 265979-81-5
265979-82-6 265979-83-7 265979-84-8 265979-85-9 265979-86-0
265979-87-1 265979-88-2 265979-89-3 265979-90-6 265979-92-8
265979-93-9 265979-94-0 265979-95-1 265979-96-2 265979-97-3
265979-98-4 265979-99-5 265980-00-5 265980-01-6 265980-02-7
265980-03-8 265980-04-9 265980-05-0 265980-07-2 629618-70-8
700846-44-2 700846-45-3 700846-46-4 700846-47-5 700846-48-6
700846-49-7 700846-50-0 700846-51-1 700846-52-2 700846-54-4
700846-55-5 700846-56-6 700846-65-7 700846-67-9

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

REFERENCE 2

AN 132:319524 CA
TI Fluorescent dye binding peptides for the determination of biomolecules
IN Nolan, Garry P.; Rozinov, Michael N.
PA The Board of Trustees of the Leland Stanford Junior University, USA
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K007-08
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 3
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015
	WO 2000023463	A3	20000817		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 1998-104465P		19981016		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. Peptides are selected from phage display libraries using the immobilized fluorophores. Fluorophores are selected from the group of Texas Red, Rhodamine Red, Oregon Green 514, and fluorescein. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide fluorette phage library				
IT	Cytometry				
	(FACS (fluorescence-activated cell sorting); fluorescent dye binding peptides for determination of biomols.)				
IT	Resonance energy				
	(fluorescence, transfer, FRET; fluorescent dye binding peptides for determination of biomols.)				
IT	Biochemical molecules				
	Fluorescent dyes				
	Fluorometry				
	Genetic methods				
	Immobilization, biochemical				
	Phage display library				
	(fluorescent dye binding peptides for determination of biomols.)				
IT	Peptides, uses				
	RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)				
	(fluorescent dye binding peptides for determination of biomols.)				
IT	2321-07-5	82354-19-6,	Texas Red	99752-92-8,	Rhodamine Red
	6	198139-49-0	265317-17-7	265317-40-6	265317-46-2
	265317-76-8	265317-77-9	265317-78-0	265317-89-3	265979-53-1
	265979-54-2	265979-55-3	265979-56-4	265979-58-6	265979-59-7
	265979-60-0	265979-61-1	265979-62-2	265979-63-3	265979-64-4
	265979-65-5	265979-66-6	265979-67-7	265979-68-8	265979-69-9
	265979-70-2	265979-71-3	265979-72-4	265979-73-5	265979-74-6
	265979-75-7	265979-76-8	265979-77-9	265979-78-0	265979-79-1
	265979-80-4	265979-81-5	265979-82-6	265979-83-7	265979-84-8
	265979-85-9	265979-86-0	265979-87-1	265979-88-2	265979-89-3
	265979-90-6	265979-91-7	265979-92-8	265979-93-9	265980-00-5
	265980-01-6	265980-02-7	265980-03-8	265980-04-9	265980-05-0
	265980-06-1	265981-56-4			
	RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)				
	(fluorescent dye binding peptides for determination of biomols.)				
IT	266300-29-2	266300-30-5	266300-31-6	266300-32-7	266300-33-8
	266300-34-9				
	RL: PRP (Properties)				
	(unclaimed nucleotide sequence; fluorescent dye binding peptides for determination of biomols.)				
IT	47070-99-5	160612-18-0	247035-66-1	247035-86-5	247037-84-9
	247037-91-8	247038-72-8	247078-49-5	250640-07-4	265980-07-2

266309-30-2 266309-33-5 266309-60-8 266310-02-5

RL: PRP (Properties)

(unclaimed protein sequence; fluorescent dye binding peptides for determination of biomols.)

IT 7361-43-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
206750-67-6 211555-82-7 246862-96-4 246862-97-5 246862-98-6
246862-99-7 246863-00-3 246863-01-4 246863-03-6 246863-04-7
246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
265979-94-0 265979-95-1 265979-96-2 265979-97-3 265979-98-4
265979-99-5 265980-08-3 266680-72-2

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides for determination of biomols.)

L1 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN

RN 265979-73-5 REGISTRY

ED Entered STN: 22 May 2000

CN L-Serine, L-asparaginyl-L-histidyl-L-valyl-L-histidyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 100: PN: WO0023463 SEQID: 20 claimed sequence

CN 125: PN: US6747135 SEQID: 20 unclaimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 12

PATENT ANNOTATIONS (PNTE):

Sequence |Patent

Source |Reference

=====+=====

Not Given|WO2000023463
|claimed SEQID
|20

SEQ 1 NHVHYWTQMF YS

===== ==

HITS AT: 1-12

SEQ3 1 Asn-His-Val-His-Tyr-Trp-Thr-Gln-Met-Phe-

=== === === === === === === === ===

11 Tyr-Ser

=== ===

HITS AT: 1-12

MF C76 H97 N19 O19 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

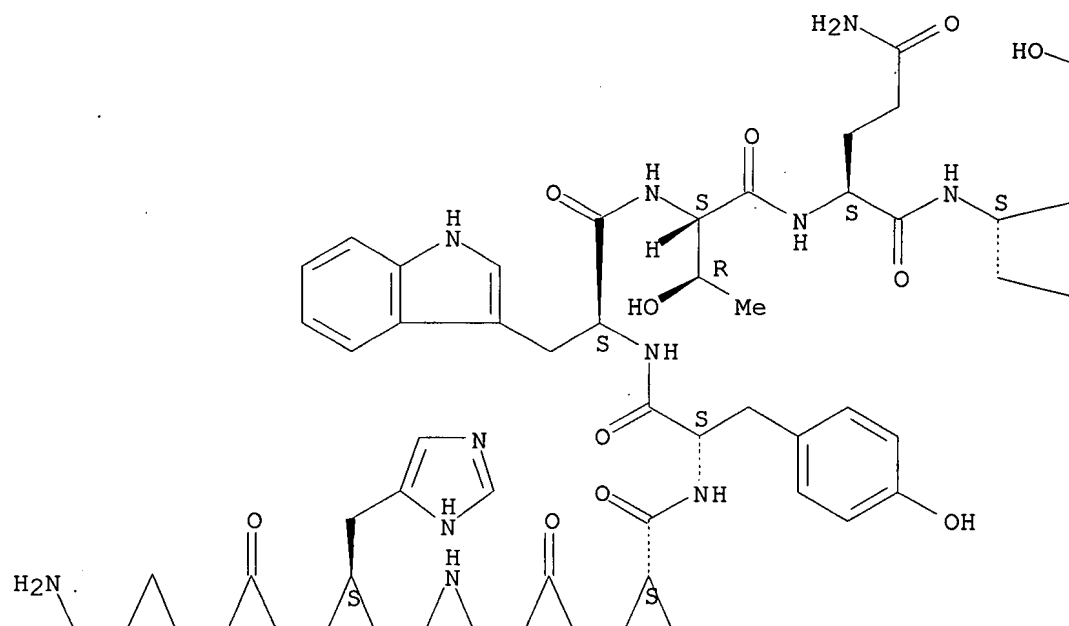
RL.P Roles from patents: ANST (Analytical study); PROC (Process); PRP (Properties); USES (Uses)

Ring System Data

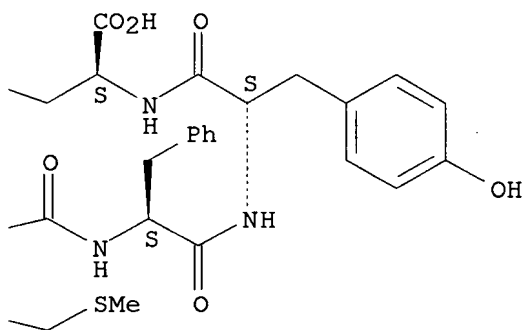
Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C3N2	NCNC2	5	C3N2	16.195.24	2
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

Absolute stereochemistry.

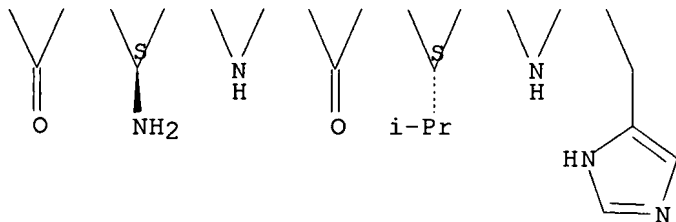
PAGE 1-A



PAGE 1-B



PAGE 2-A



Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	2092.9+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.401+/-0.06 g/cm**3	760 Torr	(1)
Enthalpy of Vap. (Hvap)	370.39+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	1219.5+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	51		(1)
H acceptors (HAC)	38		(1)
H donors (HD)	25		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	63		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-5.18	pH 1 25 deg C	(1)
LOGD (LOGD)	-5.08	pH 2 25 deg C	(1)
LOGD (LOGD)	-4.82	pH 3 25 deg C	(1)
LOGD (LOGD)	-4.57	pH 4 25 deg C	(1)
LOGD (LOGD)	-4.38	pH 5 25 deg C	(1)
LOGD (LOGD)	-3.56	pH 6 25 deg C	(1)
LOGD (LOGD)	-3.04	pH 7 25 deg C	(1)
LOGD (LOGD)	-3.55	pH 8 25 deg C	(1)
LOGD (LOGD)	-3.82	pH 9 25 deg C	(1)
LOGD (LOGD)	-4.40	pH 10 25 deg C	(1)
LOGP (LOGP)	-0.042+/-1.043	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	1000 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	19 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	4.4 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	26 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	290 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	60 g/L	Unbuffered Water	(1)
		pH 5.72	
		25 deg C	
Molar Intrinsic Solubility (ISLB.MOL)	0.62 mol/L	25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 1 25 deg C	(1)

Molar Solubility (SLB.MOL)	0.62 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.012 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0027 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.016 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.18 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.037 mol/L	Unbuffered Water	(1)
		pH 5.72	
		25 deg C	
Molar Volume (MVOL)	1150.8+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	1612.76		(1)
PKA (PKA)	3.23+/-0.10	Most Acidic	(1)
		25 deg C	
PKA (PKA)	6.68+/-0.61	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	648.97 A**2		(1)
Vapor Pressure (VP)	0 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14
((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
 TI Fluorescent dye binding peptides
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13
 ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide				
IT	Amino acids, preparation				

RL: SPN (Synthetic preparation); PREP (Preparation)
(Fluorescent dye binding peptides containing; fluorescent dye binding peptides)

IT Peptides, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(Fluorescent dye binding; fluorescent dye binding peptides)

IT Proteins
RL: SPN (Synthetic preparation); PREP (Preparation)
(Fluorescent dye containing; fluorescent dye binding peptides)

IT Aptamers
(Peptide; fluorescent dye binding peptides)

IT Dissociation
Emission spectra
Fluorescence
Fluorescent dyes
Fluorescent substances
Protein sequences
(fluorescent dye binding peptides)

IT 265979-68-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(Fluorescent dye complex with; fluorescent dye binding peptides)

IT 198139-49-ODP, peptide complex with
RL: SPN (Synthetic preparation); PREP (Preparation)
(Oregon Green 514; fluorescent dye binding peptides)

IT 2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with
RL: SPN (Synthetic preparation); PREP (Preparation)
(fluorescent dye binding peptides)

IT 700964-14-3 700964-15-4 700964-17-6 700964-18-7
RL: PRP (Properties)
(unclaimed nucleotide sequence; fluorescent dye binding peptides)

IT 700964-05-2 700964-06-3 700964-07-4 700964-08-5 700964-09-6
700964-10-9 700964-11-0 700964-12-1 700964-13-2 700964-16-5
700964-19-8 700964-20-1 700964-21-2 700964-22-3 700964-23-4
700964-24-5 700964-25-6 700964-26-7 700964-27-8 700964-28-9
700964-29-0 700964-30-3 700964-31-4 700964-32-5 700964-33-6
700964-34-7 700964-35-8 700964-36-9
RL: PRP (Properties)
(unclaimed protein sequence; fluorescent dye binding peptides)

IT 47070-99-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
206750-67-6 211555-82-7 245759-07-3 246862-96-4 246862-97-5
246862-98-6 246862-99-7 246863-00-3 246863-03-6 246863-04-7
246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
265979-53-1 265979-54-2 265979-55-3 265979-56-4 265979-58-6
265979-59-7 265979-60-0 265979-61-1 265979-62-2 265979-63-3
265979-64-4 265979-65-5 265979-66-6 265979-69-9 265979-70-2
265979-71-3 265979-72-4 265979-73-5 265979-74-6 265979-75-7
265979-76-8 265979-77-9 265979-78-0 265979-79-1 265979-81-5
265979-82-6 265979-83-7 265979-84-8 265979-85-9 265979-86-0
265979-87-1 265979-88-2 265979-89-3 265979-90-6 265979-92-8
265979-93-9 265979-94-0 265979-95-1 265979-96-2 265979-97-3
265979-98-4 265979-99-5 265980-00-5 265980-01-6 265980-02-7
265980-03-8 265980-04-9 265980-05-0 265980-07-2 629618-70-8
700846-44-2 700846-45-3 700846-46-4 700846-47-5 700846-48-6
700846-49-7 700846-50-0 700846-51-1 700846-52-2 700846-54-4
700846-55-5 700846-56-6 700846-65-7 700846-67-9
RL: PRP (Properties)
(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS

- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

REFERENCE 2

AN 132:319524 CA
 TI Fluorescent dye binding peptides for the determination of biomolecules
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees of the Leland Stanford Junior University, USA
 SO PCT Int. Appl., 64 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07K007-08
 CC 9-16 (Biochemical Methods)
 Section cross-reference(s): 3.

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015
	WO 2000023463	A3	20000817		
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 1998-104465P 19981016

AB The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. Peptides are selected from phage display libraries using the immobilized fluorophores. Fluorophores are selected from the group of Texas Red, Rhodamine Red, Oregon Green 514, and fluorescein. The peptides find use in a variety of methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide fluorett phage library

IT Cytometry
 (FACS (fluorescence-activated cell sorting); fluorescent dye binding peptides for determination of biomols.)

IT Resonance energy
 (fluorescence, transfer, FRET; fluorescent dye binding peptides for determination of biomols.)

IT Biochemical molecules

Fluorescent dyes
 Fluorometry
 Genetic methods
 Immobilization, biochemical
 Phage display library
 (fluorescent dye binding peptides for determination of biomols.)

IT Peptides, uses
 RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)
 (fluorescent dye binding peptides for determination of biomols.)

IT 2321-07-5 82354-19-6, Texas Red 99752-92-8, Rhodamine Red 178623-12-6 198139-49-0 265317-17-7 265317-40-6 265317-46-2 265317-48-4
 265317-76-8 265317-77-9 265317-78-0 265317-89-3 265979-53-1
 265979-54-2 265979-55-3 265979-56-4 265979-58-6 265979-59-7
 265979-60-0 265979-61-1 265979-62-2 265979-63-3 265979-64-4
 265979-65-5 265979-66-6 265979-67-7 265979-68-8 265979-69-9
 265979-70-2 265979-71-3 265979-72-4 265979-73-5 265979-74-6
 265979-75-7 265979-76-8 265979-77-9 265979-78-0 265979-79-1
 265979-80-4 265979-81-5 265979-82-6 265979-83-7 265979-84-8
 265979-85-9 265979-86-0 265979-87-1 265979-88-2 265979-89-3
 265979-90-6 265979-91-7 265979-92-8 265979-93-9 265980-00-5
 265980-01-6 265980-02-7 265980-03-8 265980-04-9 265980-05-0
 265980-06-1 265981-56-4
 RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)

(fluorescent dye binding peptides for determination of biomols.)

IT 266300-29-2 266300-30-5 266300-31-6 266300-32-7 266300-33-8
 266300-34-9
 RL: PRP (Properties)
 (unclaimed nucleotide sequence; fluorescent dye binding peptides for determination of biomols.)

IT 47070-99-5 160612-18-0 247035-66-1 247035-86-5 247037-84-9
 247037-91-8 247038-72-8 247078-49-5 250640-07-4 265980-07-2
 266309-30-2 266309-33-5 266309-60-8 266310-02-5
 RL: PRP (Properties)
 (unclaimed protein sequence; fluorescent dye binding peptides for determination of biomols.)

IT 7361-43-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
 206750-67-6 211555-82-7 246862-96-4 246862-97-5 246862-98-6
 246862-99-7 246863-00-3 246863-01-4 246863-03-6 246863-04-7
 246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
 265979-94-0 265979-95-1 265979-96-2 265979-97-3 265979-98-4
 265979-99-5 265980-08-3 266680-72-2
 RL: PRP (Properties)
 (unclaimed sequence; fluorescent dye binding peptides for determination of biomols.)

L1 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
 RN 265979-72-4 REGISTRY
 ED Entered STN: 22 May 2000
 CN L-Threonine, L-lysyl-L-histidyl-L-valyl-L-glutaminyL-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyL-L-methionyl-L-phenylalanyl-L-tyrosyl-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 124: PN: US6747135 SEQID: 19 unclaimed sequence
 CN 99: PN: WO0023463 SEQID: 19 claimed sequence
 FS PROTEIN SEQUENCE; STEREOSEARCH
 SQL 12

PATENT ANNOTATIONS (PNTE):

Sequence |Patent
Source |Reference
=====+=====

Not Given|WO2000023463
|claimed SEQID
|19

SEQ 1 KHVQYWTQMF YT
===== ==

HITS AT: 1-12

SEQ3 1 Lys-His-Val-Gln-Tyr-Trp-Thr-Gln-Met-Phe-
==== == == == == == == == ==
11 Tyr-Thr
==== ==

HITS AT: 1-12

MF C78 H106 N18 O19 S
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

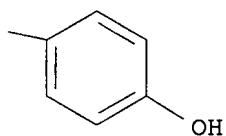
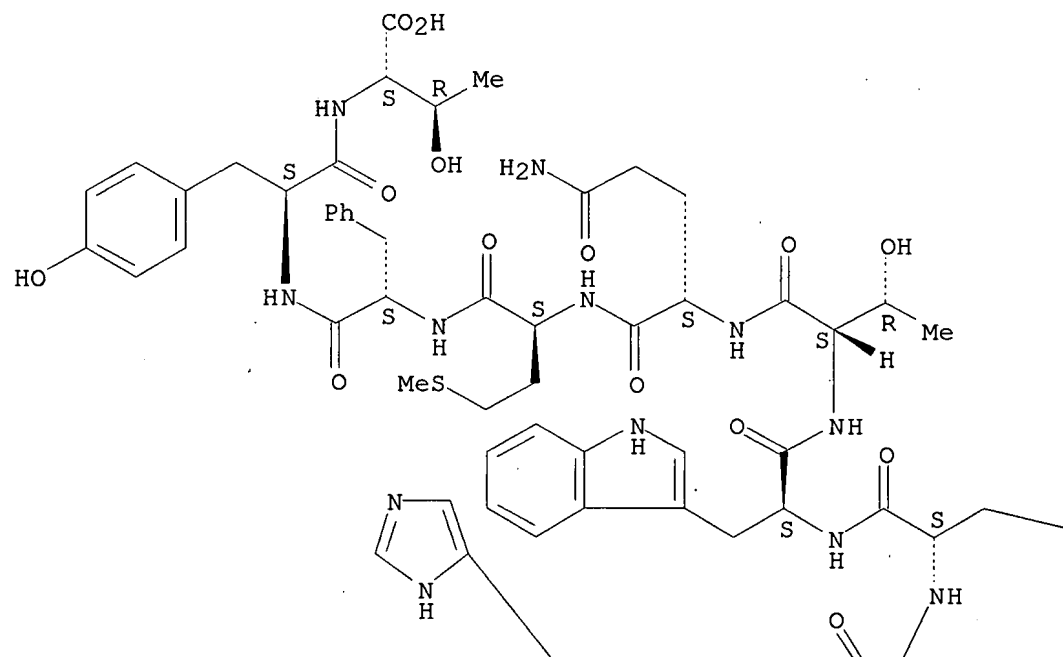
DT.CA CAplus document type: Patent

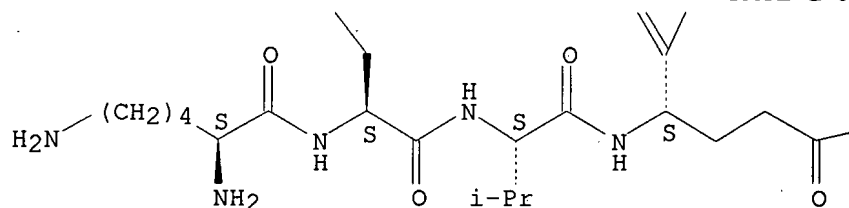
RL.P Roles from patents: ANST (Analytical study); PROC (Process); PRP
(Properties); USES (Uses)

Ring System Data

Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C3N2	NCNC2	5	C3N2	16.195.24	1
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

Absolute stereochemistry.





NH2

Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	2008.6+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.353+/-0.06 g/cm**3	760 Torr	(1)
Enthalpy of Vap. (HVAP)	350.67+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	1168.6+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	55		(1)
H acceptors (HAC)	37		(1)
H donors (HD)	26		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	63		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-4.69	pH 1 25 deg C	(1)
LOGD (LOGD)	-4.58	pH 2 25 deg C	(1)
LOGD (LOGD)	-4.32	pH 3 25 deg C	(1)
LOGD (LOGD)	-4.09	pH 4 25 deg C	(1)
LOGD (LOGD)	-3.97	pH 5 25 deg C	(1)
LOGD (LOGD)	-3.55	pH 6 25 deg C	(1)

LOGD (LOGD)	-2.67	pH 7 25 deg C	(1)
LOGD (LOGD)	-2.16	pH 8 25 deg C	(1)
LOGD (LOGD)	-2.12	pH 9 25 deg C	(1)
LOGD (LOGD)	-2.72	pH 10 25 deg C	(1)
LOGP (LOGP)	0.452+/-1.030	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	1000 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	100 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	3.3 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.77 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.69 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	3.1 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.65 g/L	Unbuffered Water	(1)
		pH 8.61	
		25 deg C	
Molar Intrinsic Solubility (ISLB.MOL)	0.61 mol/L	25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.062 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0020 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00047 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00042 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0019 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00040 mol/L	Unbuffered Water	(1)
		pH 8.61	
		25 deg C	
Molar Volume (MVOL)	1205.2+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	1631.85		(1)
PKA (PKA)	3.21+/-0.10	Most Acidic	(1)
		25 deg C	
PKA (PKA)	10.47+/-0.10	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	646.31 A**2		(1)
Vapor Pressure (VP)	0 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14
((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA

TI Fluorescent dye binding peptides

IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13
 ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide				
IT	Amino acids, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding peptides containing; fluorescent dye binding peptides)				
IT	Peptides, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding; fluorescent dye binding peptides)				
IT	Proteins				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye containing; fluorescent dye binding peptides)				
IT	Aptamers				
	(Peptide; fluorescent dye binding peptides)				
IT	Dissociation				
	Emission spectra				
	Fluorescence				
	Fluorescent dyes				
	Fluorescent substances				
	Protein sequences (fluorescent dye binding peptides)				
IT	265979-68-8P				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye complex with; fluorescent dye binding peptides)				
IT	198139-49-ODP, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Oregon Green 514; fluorescent dye binding peptides)				
IT	2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (fluorescent dye binding peptides)				
IT	700964-14-3	700964-15-4	700964-17-6	700964-18-7	
	RL: PRP (Properties) (unclaimed nucleotide sequence; fluorescent dye binding peptides)				
IT	700964-05-2	700964-06-3	700964-07-4	700964-08-5	700964-09-6
	700964-10-9	700964-11-0	700964-12-1	700964-13-2	700964-16-5
	700964-19-8	700964-20-1	700964-21-2	700964-22-3	700964-23-4
	700964-24-5	700964-25-6	700964-26-7	700964-27-8	700964-28-9
	700964-29-0	700964-30-3	700964-31-4	700964-32-5	700964-33-6
	700964-34-7	700964-35-8	700964-36-9		
	RL: PRP (Properties) (unclaimed protein sequence; fluorescent dye binding peptides)				
IT	47070-99-5	95088-49-6	110579-95-8	113965-79-0, 6-11-Peptide	(hydra

head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
 206750-67-6 211555-82-7 245759-07-3 246862-96-4 246862-97-5
 246862-98-6 246862-99-7 246863-00-3 246863-03-6 246863-04-7
 246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
 265979-53-1 265979-54-2 265979-55-3 265979-56-4 265979-58-6
 265979-59-7 265979-60-0 265979-61-1 265979-62-2 265979-63-3
 265979-64-4 265979-65-5 265979-66-6 265979-69-9 265979-70-2
 265979-71-3 265979-72-4 265979-73-5 265979-74-6 265979-75-7
 265979-76-8 265979-77-9 265979-78-0 265979-79-1 265979-81-5
 265979-82-6 265979-83-7 265979-84-8 265979-85-9 265979-86-0
 265979-87-1 265979-88-2 265979-89-3 265979-90-6 265979-92-8
 265979-93-9 265979-94-0 265979-95-1 265979-96-2 265979-97-3
 265979-98-4 265979-99-5 265980-00-5 265980-01-6 265980-02-7
 265980-03-8 265980-04-9 265980-05-0 265980-07-2 629618-70-8
 700846-44-2 700846-45-3 700846-46-4 700846-47-5 700846-48-6
 700846-49-7 700846-50-0 700846-51-1 700846-52-2 700846-54-4
 700846-55-5 700846-56-6 700846-65-7 700846-67-9

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

REFERENCE 2

AN 132:319524 CA
 TI Fluorescent dye binding peptides for the determination of biomolecules
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees of the Leland Stanford Junior University, USA
 SO PCT Int. Appl., 64 pp.
 CODEN: PIXXD2

DT Patent

LA English

IC ICM C07K007-08

CC 9-16 (Biochemical Methods)

Section cross-reference(s): 3

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015
	WO 2000023463	A3	20000817		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,

DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
 JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
 TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
 MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1998-104465P 19981016

AB The present invention is directed to novel polypeptides, termed
 fluorettes, that bind with high avidity to fluorophore dyes. Peptides are
 selected from phage display libraries using the immobilized fluorophores.
 Fluorophores are selected from the group of Texas Red, Rhodamine Red,
 Oregon Green 514, and fluorescein. The peptides find use in a variety of
 methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide fluorett phage library

IT Cytometry
 (FACS (fluorescence-activated cell sorting); fluorescent dye binding
 peptides for determination of biomols.)

IT Resonance energy
 (fluorescence, transfer, FRET; fluorescent dye binding peptides for
 determination of biomols.)

IT Biochemical molecules
 Fluorescent dyes
 Fluorometry
 Genetic methods
 Immobilization, biochemical
 Phage display library
 (fluorescent dye binding peptides for determination of biomols.)

IT Peptides, uses
 RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical
 process); PRP (Properties); ANST (Analytical study); PROC (Process); USES
 (Uses)
 (fluorescent dye binding peptides for determination of biomols.)

IT 2321-07-5 82354-19-6, Texas Red 99752-92-8, Rhodamine Red 178623-12-
 6 198139-49-0 265317-17-7 265317-40-6 265317-46-2 265317-48-4
 265317-76-8 265317-77-9 265317-78-0 265317-89-3 265979-53-1
 265979-54-2 265979-55-3 265979-56-4 265979-58-6 265979-59-7
 265979-60-0 265979-61-1 265979-62-2 265979-63-3 265979-64-4
 265979-65-5 265979-66-6 265979-67-7 265979-68-8 265979-69-9
 265979-70-2 265979-71-3 265979-72-4 265979-73-5 265979-74-6
 265979-75-7 265979-76-8 265979-77-9 265979-78-0 265979-79-1
 265979-80-4 265979-81-5 265979-82-6 265979-83-7 265979-84-8
 265979-85-9 265979-86-0 265979-87-1 265979-88-2 265979-89-3
 265979-90-6 265979-91-7 265979-92-8 265979-93-9 265980-00-5
 265980-01-6 265980-02-7 265980-03-8 265980-04-9 265980-05-0
 265980-06-1 265981-56-4
 RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical
 process); PRP (Properties); ANST (Analytical study); PROC (Process); USES
 (Uses)
 (fluorescent dye binding peptides for determination of biomols.)

IT 266300-29-2 266300-30-5 266300-31-6 266300-32-7 266300-33-8
 266300-34-9
 RL: PRP (Properties)
 (unclaimed nucleotide sequence; fluorescent dye binding peptides for
 determination of biomols.)

IT 47070-99-5 160612-18-0 247035-66-1 247035-86-5 247037-84-9
 247037-91-8 247038-72-8 247078-49-5 250640-07-4 265980-07-2
 266309-30-2 266309-33-5 266309-60-8 266310-02-5
 RL: PRP (Properties)
 (unclaimed protein sequence; fluorescent dye binding peptides for
 determination
 of biomols.)

IT 7361-43-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
 206750-67-6 211555-82-7 246862-96-4 246862-97-5 246862-98-6
 246862-99-7 246863-00-3 246863-01-4 246863-03-6 246863-04-7
 246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
 265979-94-0 265979-95-1 265979-96-2 265979-97-3 265979-98-4
 265979-99-5 265980-08-3 266680-72-2
 RL: PRP (Properties)
 (unclaimed sequence; fluorescent dye binding peptides for determination of biomols.)

L1 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
 RN 265979-71-3 REGISTRY
 ED Entered STN: 22 May 2000
 CN L-Threonine, L-lysyl-L-histidyl-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-histidyl-L-methionyl-L-phenylalanyl-L-tyrosyl-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 123: PN: US6747135 SEQID: 18 unclaimed sequence
 CN 98: PN: WO0023463 SEQID: 18 claimed sequence
 FS PROTEIN SEQUENCE; STEREOSEARCH
 SQL 12

PATENT ANNOTATIONS (PNTE):

Sequence |Patent
 Source |Reference
 =====+=====

Not Given	WO2000023463
	claimed SEQID
	18

SEQ 1 KHVQYWTHMF YT
 ===== ==

HITS AT: 1-12

SEQ3 1 Lys-His-Val-Gln-Tyr-Trp-Thr-His-Met-Phe-
 === == == == == == == == ==

11 Tyr-Thr
 === ==

HITS AT: 1-12

MF C79 H105 N19 O18 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

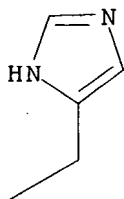
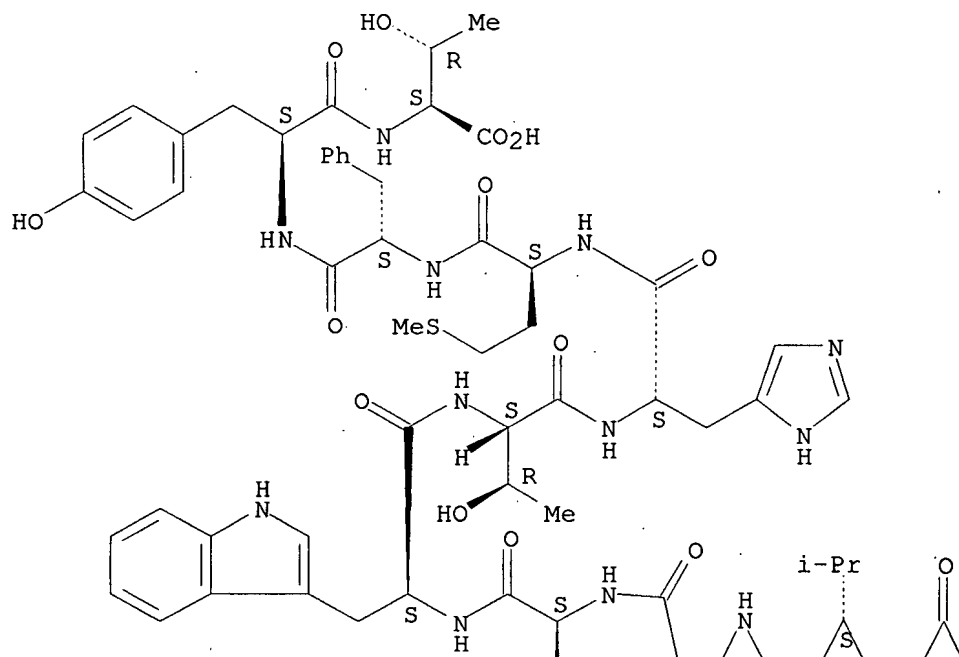
DT.CA Caplus document type: Patent

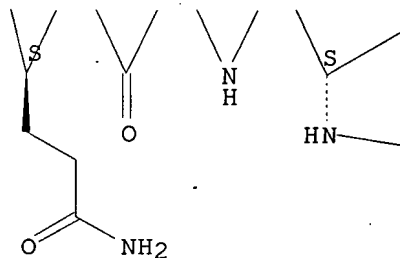
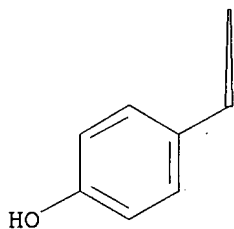
RL.P Roles from patents: ANST (Analytical study); PROC (Process); PRP (Properties); USES (Uses)

Ring System Data

Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C3N2	NCNC2	5	C3N2	16.195.24	2
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

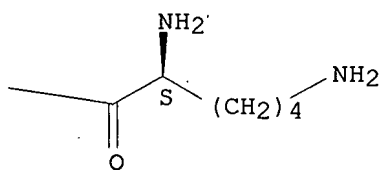
Absolute stereochemistry.





PAGE 2-A

PAGE 2-B



Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	2019.1+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.363+/-0.06 g/cm**3	760 Torr	(1)
Enthalpy of Vap. (HVAP)	353.09+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	1174.9+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	54		(1)
H acceptors (HAC)	37		(1)
H donors (HD)	25		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	62		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)

LOGD (LOGD)	-5.30	pH 1 25 deg C	(1)
LOGD (LOGD)	-5.20	pH 2 25 deg C	(1)
LOGD (LOGD)	-4.93	pH 3 25 deg C	(1)
LOGD (LOGD)	-4.70	pH 4 25 deg C	(1)
LOGD (LOGD)	-4.57	pH 5 25 deg C	(1)
LOGD (LOGD)	-3.80	pH 6 25 deg C	(1)
LOGD (LOGD)	-2.34	pH 7 25 deg C	(1)
LOGD (LOGD)	-1.78	pH 8 25 deg C	(1)
LOGD (LOGD)	-1.73	pH 9 25 deg C	(1)
LOGD (LOGD)	-2.33	pH 10 25 deg C	(1)
LOGP (LOGP)	0.840+/-1.036	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	1000 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	280 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	2.0 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.43 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.38 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.8 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.36 g/L	Unbuffered Water	(1)
		pH 8.58	
Molar Intrinsic Solubility (ISLB.MOL)	0.61 mol/L	25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.61 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.17 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0012 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00026 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00023 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0011 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00022 mol/L	Unbuffered Water	(1)
		pH 8.58	
		25 deg C	
Molar Volume (MVOL)	1203.6+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	1640.86		(1)
PKA (PKA)	3.21+/-0.10	Most Acidic	(1)
		25 deg C	
PKA (PKA)	10.47+/-0.10	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	631.90 A**2		(1)
Vapor Pressure (VP)	0 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14
(C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.
2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
 TI Fluorescent dye binding peptides
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13
 ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide				
IT	Amino acids, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding peptides containing; fluorescent dye binding peptides)				
IT	Peptides, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding; fluorescent dye binding peptides).				
IT	Proteins				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye containing; fluorescent dye binding peptides)				
IT	Aptamers				
	(Peptide; fluorescent dye binding peptides)				
IT	Dissociation				
	Emission spectra				
	Fluorescence				
	Fluorescent dyes				
	Fluorescent substances				
	Protein sequences				
	(fluorescent dye binding peptides)				
IT	265979-68-8P				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye complex with; fluorescent dye binding peptides)				
IT	198139-49-ODP, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Oregon Green 514; fluorescent dye binding peptides)				
IT	2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (fluorescent dye binding peptides)				
IT	700964-14-3	700964-15-4	700964-17-6	700964-18-7	
	RL: PRP (Properties) (unclaimed nucleotide sequence; fluorescent dye binding peptides)				
IT	700964-05-2	700964-06-3	700964-07-4	700964-08-5	700964-09-6
	700964-10-9	700964-11-0	700964-12-1	700964-13-2	700964-16-5
	700964-19-8	700964-20-1	700964-21-2	700964-22-3	700964-23-4

700964-24-5	700964-25-6	700964-26-7	700964-27-8	700964-28-9
700964-29-0	700964-30-3	700964-31-4	700964-32-5	700964-33-6
700964-34-7	700964-35-8	700964-36-9		

RL: PRP (Properties)

(unclaimed protein sequence; fluorescent dye binding peptides)

IT 47070-99-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5

206750-67-6	211555-82-7	245759-07-3	246862-96-4	246862-97-5
246862-98-6	246862-99-7	246863-00-3	246863-03-6	246863-04-7
246863-05-8	246863-06-9	246863-07-0	246863-08-1	260055-30-9
265979-53-1	265979-54-2	265979-55-3	265979-56-4	265979-58-6
265979-59-7	265979-60-0	265979-61-1	265979-62-2	265979-63-3
265979-64-4	265979-65-5	265979-66-6	265979-69-9	265979-70-2
265979-71-3	265979-72-4	265979-73-5	265979-74-6	265979-75-7
265979-76-8	265979-77-9	265979-78-0	265979-79-1	265979-81-5
265979-82-6	265979-83-7	265979-84-8	265979-85-9	265979-86-0
265979-87-1	265979-88-2	265979-89-3	265979-90-6	265979-92-8
265979-93-9	265979-94-0	265979-95-1	265979-96-2	265979-97-3
265979-98-4	265979-99-5	265980-00-5	265980-01-6	265980-02-7
265980-03-8	265980-04-9	265980-05-0	265980-07-2	629618-70-8
700846-44-2	700846-45-3	700846-46-4	700846-47-5	700846-48-6
700846-49-7	700846-50-0	700846-51-1	700846-52-2	700846-54-4
700846-55-5	700846-56-6	700846-65-7	700846-67-9	

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

REFERENCE 2

AN 132:319524 CA

TI Fluorescent dye binding peptides for the determination of biomolecules

IN Nolan, Garry P.; Rozinov, Michael N.

PA The Board of Trustees of the Leland Stanford Junior University, USA

SO PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07K007-08

CC 9-16 (Biochemical Methods)

Section cross-reference(s): 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015
	WO 2000023463	A3	20000817		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 1998-104465P		19981016		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. Peptides are selected from phage display libraries using the immobilized fluorophores. Fluorophores are selected from the group of Texas Red, Rhodamine Red, Oregon Green 514, and fluorescein. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide fluorette phage library				
IT	Cytometry				
	(FACS (fluorescence-activated cell sorting); fluorescent dye binding peptides for determination of biomols.)				
IT	Resonance energy				
	(fluorescence, transfer, FRET; fluorescent dye binding peptides for determination of biomols.)				
IT	Biochemical molecules				
	Fluorescent dyes				
	Fluorometry				
	Genetic methods				
	Immobilization, biochemical				
	Phage display library				
	(fluorescent dye binding peptides for determination of biomols.)				
IT	Peptides, uses				
	RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)				
	(fluorescent dye binding peptides for determination of biomols.)				
IT	2321-07-5	82354-19-6,	Texas Red	99752-92-8,	Rhodamine Red
	6	198139-49-0	265317-17-7	265317-40-6	265317-46-2
	265317-76-8	265317-77-9	265317-78-0	265317-89-3	265979-53-1
	265979-54-2	265979-55-3	265979-56-4	265979-58-6	265979-59-7
	265979-60-0	265979-61-1	265979-62-2	265979-63-3	265979-64-4
	265979-65-5	265979-66-6	265979-67-7	265979-68-8	265979-69-9
	265979-70-2	265979-71-3	265979-72-4	265979-73-5	265979-74-6
	265979-75-7	265979-76-8	265979-77-9	265979-78-0	265979-79-1
	265979-80-4	265979-81-5	265979-82-6	265979-83-7	265979-84-8
	265979-85-9	265979-86-0	265979-87-1	265979-88-2	265979-89-3
	265979-90-6	265979-91-7	265979-92-8	265979-93-9	265980-00-5
	265980-01-6	265980-02-7	265980-03-8	265980-04-9	265980-05-0
	265980-06-1	265981-56-4			
	RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)				
	(fluorescent dye binding peptides for determination of biomols.)				
IT	266300-29-2	266300-30-5	266300-31-6	266300-32-7	266300-33-8
	266300-34-9				
	RL: PRP (Properties)				
	(unclaimed nucleotide sequence; fluorescent dye binding peptides for determination of biomols.)				
IT	47070-99-5	160612-18-0	247035-66-1	247035-86-5	247037-84-9

247037-91-8 247038-72-8 247078-49-5 250640-07-4 265980-07-2
266309-30-2 266309-33-5 266309-60-8 266310-02-5

RL: PRP (Properties)

(unclaimed protein sequence; fluorescent dye binding peptides for
determination
of biomols.)

IT 7361-43-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra
head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
206750-67-6 211555-82-7 246862-96-4 246862-97-5 246862-98-6
246862-99-7 246863-00-3 246863-01-4 246863-03-6 246863-04-7
246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
265979-94-0 265979-95-1 265979-96-2 265979-97-3 265979-98-4
265979-99-5 265980-08-3 266680-72-2

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides for determination of
biomols.)

L1 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN

RN 265979-70-2 REGISTRY

ED Entered STN: 22 May 2000

CN L-Threonine, L-lysyl-L-asparaginyl-L-valyl-L-glutaminyl-L-tyrosyl-L-
tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl-
(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 122: PN: US6747135 SEQID: 17 unclaimed sequence

CN 97: PN: WO0023463 SEQID: 17 claimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 12

PATENT ANNOTATIONS (PNTE):

Sequence |Patent

Source |Reference

=====+=====

Not Given|WO2000023463

|claimed SEQID

|17

SEQ 1 KNVQYWTQMF YT

===== ==

HITS AT: 1-12

SEQ3 1 Lys-Asn-Val-Gln-Tyr-Trp-Thr-Gln-Met-Phe-

=== === === === === === === === ===

11 Tyr-Thr

=== ===

HITS AT: 1-12

MF C76 H105 N17 O20 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA Caplus document type: Patent

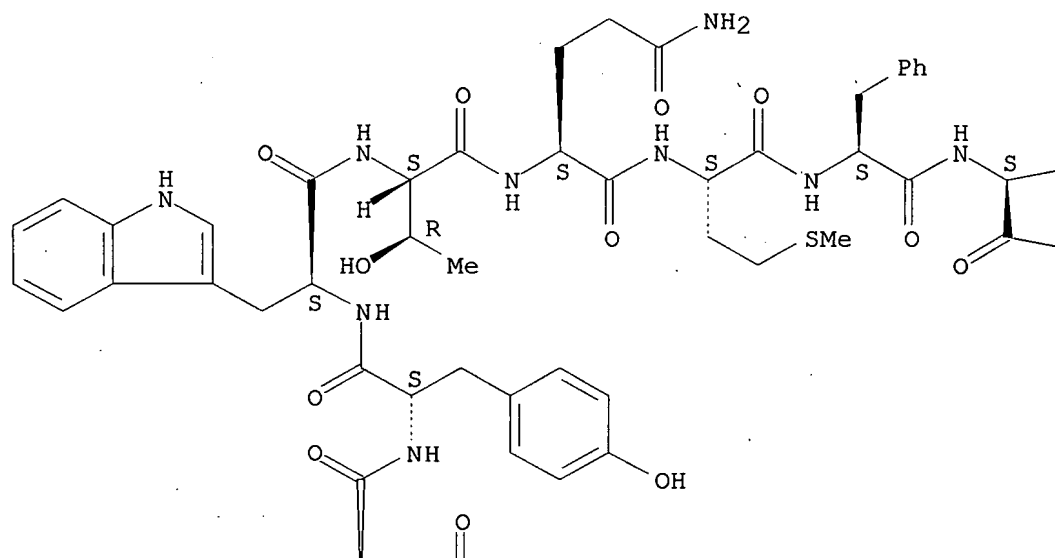
RL.P Roles from patents: ANST (Analytical study); PROC (Process); PRP
(Properties); USES (Uses)

Ring System Data

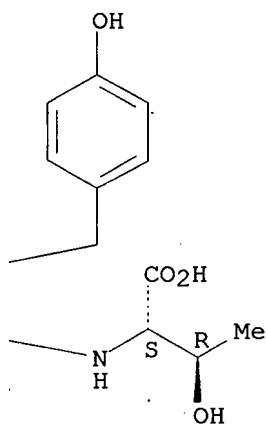
Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

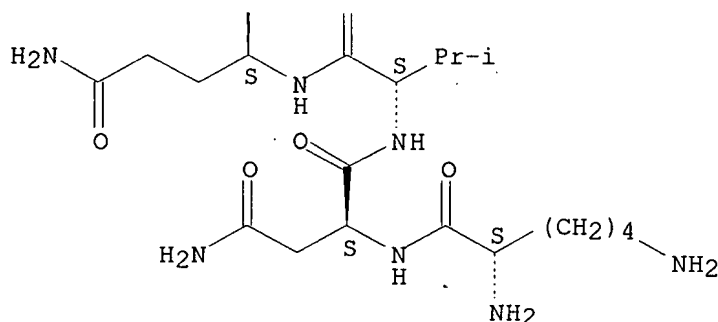
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	2001.6+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.351+/-0.06 g/cm**3	760 Torr	(1)
Enthalpy of Vap. (HVP)	349.04+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	1164.3+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	55		(1)
H acceptors (HAC)	37		(1)
H donors (HD)	27		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	64		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-3.99	pH 1 25 deg C	(1)
LOGD (LOGD)	-3.88	pH 2 25 deg C	(1)
LOGD (LOGD)	-3.62	pH 3 25 deg C	(1)
LOGD (LOGD)	-3.40	pH 4 25 deg C	(1)
LOGD (LOGD)	-3.34	pH 5 25 deg C	(1)
LOGD (LOGD)	-3.25	pH 6 25 deg C	(1)
LOGD (LOGD)	-2.86	pH 7 25 deg C	(1)
LOGD (LOGD)	-2.46	pH 8 25 deg C	(1)
LOGD (LOGD)	-2.42	pH 9 25 deg C	(1)
LOGD (LOGD)	-3.02	pH 10 25 deg C	(1)
LOGP (LOGP)	0.151+/-1.034	25 deg C	(1)

Mass Intrinsic Solubility (ISLB.MASS)	1000 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	290 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	29 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	3.7 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.2 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.1 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	4.8 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.0 g/L	Unbuffered Water	(1)
		pH 8.62	
		25 deg C	
Molar Intrinsic Solubility (ISLB.MOL)	0.62 mol/L	25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.18 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.018 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0023 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00074 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00066 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0030 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00063 mol/L	Unbuffered Water	(1)
		pH 8.62	
		25 deg C	
Molar Volume (MVOL)	1190.2+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	1608.81		(1)
PKA (PKA)	3.21+/-0.10	Most Acidic	(1)
		25 deg C	
PKA (PKA)	10.47+/-0.10	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	660.72 A**2		(1)
Vapor Pressure (VP)	0 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14 ((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
TI Fluorescent dye binding peptides
IN Nolan, Garry P.; Rozinov, Michael N.
PA The Board of Trustees for the Leland Stanford Junior University, USA
SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
CODEN: USXXAM
DT Patent

LA English
 IC ICM C07K001-13
 ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide				
IT	Amino acids, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding peptides containing; fluorescent dye binding peptides)				
IT	Peptides, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding; fluorescent dye binding peptides)				
IT	Proteins				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye containing; fluorescent dye binding peptides)				
IT	Aptamers				
	(Peptide; fluorescent dye binding peptides)				
IT	Dissociation				
	Emission spectra				
	Fluorescence				
	Fluorescent dyes				
	Fluorescent substances				
	Protein sequences				
	(fluorescent dye binding peptides)				
IT	265979-68-8P				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye complex with; fluorescent dye binding peptides)				
IT	198139-49-ODP, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Oregon Green 514; fluorescent dye binding peptides)				
IT	2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (fluorescent dye binding peptides)				
IT	700964-14-3	700964-15-4	700964-17-6	700964-18-7	
	RL: PRP (Properties) (unclaimed nucleotide sequence; fluorescent dye binding peptides)				
IT	700964-05-2	700964-06-3	700964-07-4	700964-08-5	700964-09-6
	700964-10-9	700964-11-0	700964-12-1	700964-13-2	700964-16-5
	700964-19-8	700964-20-1	700964-21-2	700964-22-3	700964-23-4
	700964-24-5	700964-25-6	700964-26-7	700964-27-8	700964-28-9
	700964-29-0	700964-30-3	700964-31-4	700964-32-5	700964-33-6
	700964-34-7	700964-35-8	700964-36-9		
	RL: PRP (Properties) (unclaimed protein sequence; fluorescent dye binding peptides)				
IT	47070-99-5	95088-49-6	110579-95-8	113965-79-0, 6-11-Peptide (hydra head-activator)	
	206750-67-6	211555-82-7	245759-07-3	246862-96-4	246862-97-5
	246862-98-6	246862-99-7	246863-00-3	246863-03-6	246863-04-7
	246863-05-8	246863-06-9	246863-07-0	246863-08-1	260055-30-9
	265979-53-1	265979-54-2	265979-55-3	265979-56-4	265979-58-6

265979-59-7	265979-60-0	265979-61-1	265979-62-2	265979-63-3
265979-64-4	265979-65-5	265979-66-6	265979-69-9	265979-70-2
265979-71-3	265979-72-4	265979-73-5	265979-74-6	265979-75-7
265979-76-8	265979-77-9	265979-78-0	265979-79-1	265979-81-5
265979-82-6	265979-83-7	265979-84-8	265979-85-9	265979-86-0
265979-87-1	265979-88-2	265979-89-3	265979-90-6	265979-92-8
265979-93-9	265979-94-0	265979-95-1	265979-96-2	265979-97-3
265979-98-4	265979-99-5	265980-00-5	265980-01-6	265980-02-7
265980-03-8	265980-04-9	265980-05-0	265980-07-2	629618-70-8
700846-44-2	700846-45-3	700846-46-4	700846-47-5	700846-48-6
700846-49-7	700846-50-0	700846-51-1	700846-52-2	700846-54-4
700846-55-5	700846-56-6	700846-65-7	700846-67-9	

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

REFERENCE 2

AN 132:319524 CA
 TI Fluorescent dye binding peptides for the determination of biomolecules
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees of the Leland Stanford Junior University, USA
 SO PCT Int. Appl., 64 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07K007-08
 CC 9-16 (Biochemical Methods)
 Section cross-reference(s): 3

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015
	WO 2000023463	A3	20000817		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1998-104465P 19981016

AB The present invention is directed to novel polypeptides, termed
fluorettes, that bind with high avidity to fluorophore dyes. Peptides are
selected from phage display libraries using the immobilized fluorophores.
Fluorophores are selected from the group of Texas Red, Rhodamine Red,
Oregon Green 514, and fluorescein. The peptides find use in a variety of
methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide fluorette phage library

IT Cytometry

(FACS (fluorescence-activated cell sorting); fluorescent dye binding
peptides for determination of biomols.)

IT Resonance energy

(fluorescence, transfer, FRET; fluorescent dye binding peptides for
determination of biomols.)

IT Biochemical molecules

Fluorescent dyes

Fluorometry

Genetic methods

Immobilization, biochemical

Phage display library

(fluorescent dye binding peptides for determination of biomols.)

IT Peptides, uses

RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical
process); PRP (Properties); ANST (Analytical study); PROC (Process); USES
(Uses)

(fluorescent dye binding peptides for determination of biomols.)

IT 2321-07-5 82354-19-6, Texas Red 99752-92-8, Rhodamine Red 178623-12-
6 198139-49-0 265317-17-7 265317-40-6 265317-46-2 265317-48-4

265317-76-8 265317-77-9 265317-78-0 265317-89-3 265979-53-1

265979-54-2 265979-55-3 265979-56-4 265979-58-6 265979-59-7

265979-60-0 265979-61-1 265979-62-2 265979-63-3 265979-64-4

265979-65-5 265979-66-6 265979-67-7 265979-68-8 265979-69-9

265979-70-2 265979-71-3 265979-72-4 265979-73-5 265979-74-6

265979-75-7 265979-76-8 265979-77-9 265979-78-0 265979-79-1

265979-80-4 265979-81-5 265979-82-6 265979-83-7 265979-84-8

265979-85-9 265979-86-0 265979-87-1 265979-88-2 265979-89-3

265979-90-6 265979-91-7 265979-92-8 265979-93-9 265980-00-5

265980-01-6 265980-02-7 265980-03-8 265980-04-9 265980-05-0

265980-06-1 265981-56-4

RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical
process); PRP (Properties); ANST (Analytical study); PROC (Process); USES
(Uses)

(fluorescent dye binding peptides for determination of biomols.)

IT 266300-29-2 266300-30-5 266300-31-6 266300-32-7 266300-33-8
266300-34-9

RL: PRP (Properties)

(unclaimed nucleotide sequence; fluorescent dye binding peptides for
determination of biomols.)

IT 47070-99-5 160612-18-0 247035-66-1 247035-86-5 247037-84-9

247037-91-8 247038-72-8 247078-49-5 250640-07-4 265980-07-2

266309-30-2 266309-33-5 266309-60-8 266310-02-5

RL: PRP (Properties)

(unclaimed protein sequence; fluorescent dye binding peptides for
determination
of biomols.)

IT 7361-43-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra
head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5

206750-67-6 211555-82-7 246862-96-4 246862-97-5 246862-98-6

246862-99-7 246863-00-3 246863-01-4 246863-03-6 246863-04-7

246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9

265979-94-0 265979-95-1 265979-96-2 265979-97-3 265979-98-4
265979-99-5 265980-08-3 266680-72-2

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides for determination of biomols.)

L1 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
RN 265979-69-9 REGISTRY
ED Entered STN: 22 May 2000
CN L-Serine, L-lysyl-L-prolyl-L-alanyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 121: PN: US6747135 SEQID: 16 unclaimed sequence

CN 96: PN: WO0023463 SEQID: 16 claimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 12

PATENT ANNOTATIONS (PNTE):

Sequence |Patent

Source |Reference

=====+=====

Not Given|WO2000023463

|claimed SEQID

|16

SEQ 1 KPAQYWTQMF YS

===== ==

HITS AT: 1-12

SEQ3 1 Lys-Pro-Ala-Gln-Tyr-Trp-Thr-Gln-Met-Phe-

=== == == == == == == == == ==

11 Tyr-Ser

=== ==

HITS AT: 1-12

MF C74 H100 N16 O19 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

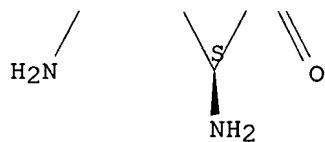
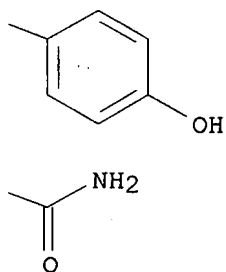
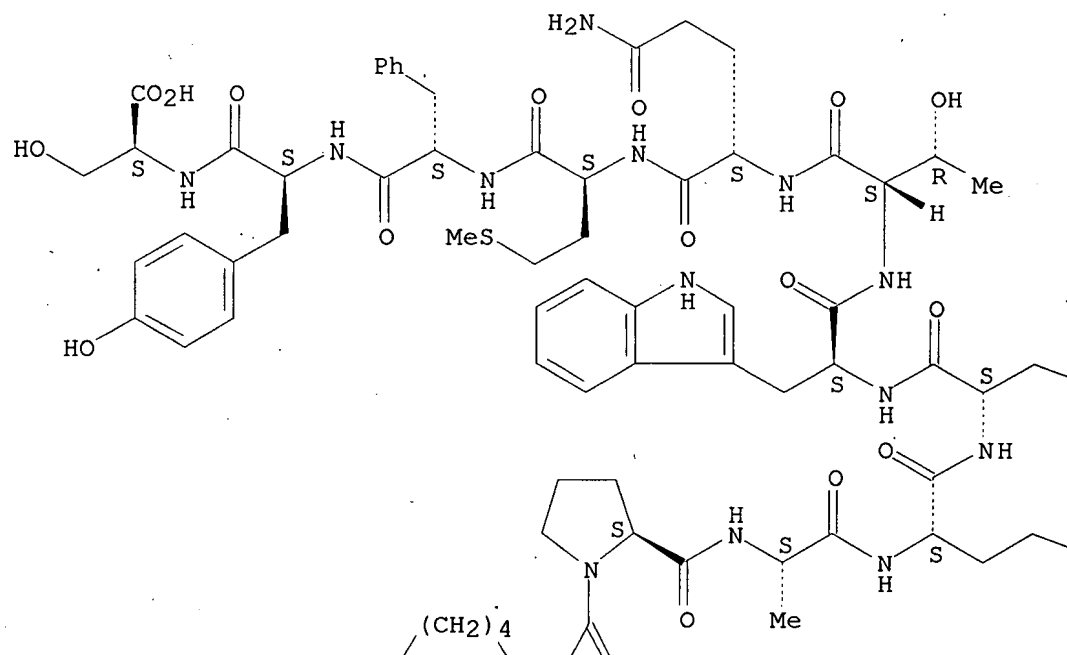
DT.CA CAplus document type: Patent

RL.P Roles from patents: ANST (Analytical study); PROC (Process); PRP (Properties); USES (Uses)

Ring System Data

Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C4N	NC4	5	C4N	16.136.1	1
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

Absolute stereochemistry.



Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	1941.4+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.366+/-0.06 g/cm**3	760 Torr	(1)
Enthalpy of Vap. (HVAP)	335.30+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	1127.9+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	51		(1)
H acceptors (HAC)	35		(1)
H donors (HD)	24		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	59		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-4.19	pH 1 25 deg C	(1)
LOGD (LOGD)	-4.09	pH 2 25 deg C	(1)
LOGD (LOGD)	-3.83	pH 3 25 deg C	(1)
LOGD (LOGD)	-3.60	pH 4 25 deg C	(1)
LOGD (LOGD)	-3.55	pH 5 25 deg C	(1)
LOGD (LOGD)	-3.52	pH 6 25 deg C	(1)
LOGD (LOGD)	-3.32	pH 7 25 deg C	(1)
LOGD (LOGD)	-2.84	pH 8 25 deg C	(1)
LOGD (LOGD)	-2.65	pH 9 25 deg C	(1)
LOGD (LOGD)	-3.22	pH 10 25 deg C	(1)
LOGP (LOGP)	-0.052+/-1.029	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	1000 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	140 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	15 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	2.5 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.5 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	6.4 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.5 g/L	Unbuffered Water	(1)
		pH 8.88	

Molar Intrinsic Solubility (ISLB.MOL)	0.65 mol/L	25 deg C	
Molar Solubility (SLB.MOL)	0.65 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.65 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.65 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.65 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.65 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.088 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0095 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0016 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00097 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0041 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00096 mol/L	Unbuffered Water	(1)
		pH 8.88	
		25 deg C	
Molar Volume (MVOL)	1133.9+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	1549.75		(1)
PKA (PKA)	3.23+/-0.10	Most Acidic	(1)
		25 deg C	
PKA (PKA)	10.49+/-0.10	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	608.84 A**2		(1)
Vapor Pressure (VP)	0 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14 ((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
 TI Fluorescent dye binding peptides
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13
 ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides				

find use in a variety of methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide

IT Amino acids, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)

(Fluorescent dye binding peptides containing; fluorescent dye binding peptides)

IT Peptides, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)

(Fluorescent dye binding; fluorescent dye binding peptides)

IT Proteins

RL: SPN (Synthetic preparation); PREP (Preparation)

(Fluorescent dye containing; fluorescent dye binding peptides)

IT Aptamers

(Peptide; fluorescent dye binding peptides)

IT Dissociation

Emission spectra

Fluorescence

Fluorescent dyes

Fluorescent substances

Protein sequences

(fluorescent dye binding peptides)

IT 265979-68-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(Fluorescent dye complex with; fluorescent dye binding peptides)

IT 198139-49-ODP, peptide complex with

RL: SPN (Synthetic preparation); PREP (Preparation)

(Oregon Green 514; fluorescent dye binding peptides)

IT 2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with

RL: SPN (Synthetic preparation); PREP (Preparation)

(fluorescent dye binding peptides)

IT 700964-14-3 700964-15-4 700964-17-6 700964-18-7

RL: PRP (Properties)

(unclaimed nucleotide sequence; fluorescent dye binding peptides)

IT 700964-05-2 700964-06-3 700964-07-4 700964-08-5 700964-09-6

700964-10-9 700964-11-0 700964-12-1 700964-13-2 700964-16-5

700964-19-8 700964-20-1 700964-21-2 700964-22-3 700964-23-4

700964-24-5 700964-25-6 700964-26-7 700964-27-8 700964-28-9

700964-29-0 700964-30-3 700964-31-4 700964-32-5 700964-33-6

700964-34-7 700964-35-8 700964-36-9

RL: PRP (Properties)

(unclaimed protein sequence; fluorescent dye binding peptides)

IT 47070-99-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5

206750-67-6 211555-82-7 245759-07-3 246862-96-4 246862-97-5

246862-98-6 246862-99-7 246863-00-3 246863-03-6 246863-04-7

246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9

265979-53-1 265979-54-2 265979-55-3 265979-56-4 265979-58-6

265979-59-7 265979-60-0 265979-61-1 265979-62-2 265979-63-3

265979-64-4 265979-65-5 265979-66-6 265979-69-9 265979-70-2

265979-71-3 265979-72-4 265979-73-5 265979-74-6 265979-75-7

265979-76-8 265979-77-9 265979-78-0 265979-79-1 265979-81-5

265979-82-6 265979-83-7 265979-84-8 265979-85-9 265979-86-0

265979-87-1 265979-88-2 265979-89-3 265979-90-6 265979-92-8

265979-93-9 265979-94-0 265979-95-1 265979-96-2 265979-97-3

265979-98-4 265979-99-5 265980-00-5 265980-01-6 265980-02-7

265980-03-8 265980-04-9 265980-05-0 265980-07-2 629618-70-8

700846-44-2 700846-45-3 700846-46-4 700846-47-5 700846-48-6

700846-49-7 700846-50-0 700846-51-1 700846-52-2 700846-54-4

700846-55-5 700846-56-6 700846-65-7 700846-67-9

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

REFERENCE 2

AN 132:319524 CA
TI Fluorescent dye binding peptides for the determination of biomolecules
IN Nolan, Garry P.; Rozinov, Michael N.
PA The Board of Trustees of the Leland Stanford Junior University, USA
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K007-08
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 3

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015
	WO 2000023463	A3	20000817		
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 1998-104465P 19981016

AB The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. Peptides are selected from phage display libraries using the immobilized fluorophores. Fluorophores are selected from the group of Texas Red, Rhodamine Red, Oregon Green 514, and fluorescein. The peptides find use in a variety of methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide fluorette phage library

IT Cytometry

(FACS (fluorescence-activated cell sorting); fluorescent dye binding peptides for determination of biomols.)

IT Resonance energy
(fluorescence, transfer, FRET; fluorescent dye binding peptides for determination of biomols.)

IT Biochemical molecules
Fluorescent dyes
Fluorometry
Genetic methods
Immobilization, biochemical
Phage display library
(fluorescent dye binding peptides for determination of biomols.)

IT Peptides, uses
RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)
(fluorescent dye binding peptides for determination of biomols.)

IT 2321-07-5 82354-19-6, Texas Red 99752-92-8, Rhodamine Red 178623-12-6 198139-49-0 265317-17-7 265317-40-6 265317-46-2 265317-48-4
265317-76-8 265317-77-9 265317-78-0 265317-89-3 265979-53-1
265979-54-2 265979-55-3 265979-56-4 265979-58-6 265979-59-7
265979-60-0 265979-61-1 265979-62-2 265979-63-3 265979-64-4
265979-65-5 265979-66-6 265979-67-7 265979-68-8 265979-69-9
265979-70-2 265979-71-3 265979-72-4 265979-73-5 265979-74-6
265979-75-7 265979-76-8 265979-77-9 265979-78-0 265979-79-1
265979-80-4 265979-81-5 265979-82-6 265979-83-7 265979-84-8
265979-85-9 265979-86-0 265979-87-1 265979-88-2 265979-89-3
265979-90-6 265979-91-7 265979-92-8 265979-93-9 265980-00-5
265980-01-6 265980-02-7 265980-03-8 265980-04-9 265980-05-0
265980-06-1 265981-56-4
RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)
(fluorescent dye binding peptides for determination of biomols.)

IT 266300-29-2 266300-30-5 266300-31-6 266300-32-7 266300-33-8
266300-34-9
RL: PRP (Properties)
(unclaimed nucleotide sequence; fluorescent dye binding peptides for determination of biomols.)

IT 47070-99-5 160612-18-0 247035-66-1 247035-86-5 247037-84-9
247037-91-8 247038-72-8 247078-49-5 250640-07-4 265980-07-2
266309-30-2 266309-33-5 266309-60-8 266310-02-5
RL: PRP (Properties)
(unclaimed protein sequence; fluorescent dye binding peptides for determination of biomols.)

IT 7361-43-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
206750-67-6 211555-82-7 246862-96-4 246862-97-5 246862-98-6
246862-99-7 246863-00-3 246863-01-4 246863-03-6 246863-04-7
246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
265979-94-0 265979-95-1 265979-96-2 265979-97-3 265979-98-4
265979-99-5 265980-08-3 266680-72-2
RL: PRP (Properties)
(unclaimed sequence; fluorescent dye binding peptides for determination of biomols.)

L1 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
RN 265979-68-8 REGISTRY
ED Entered STN: 22 May 2000
CN L-Threonine, L-lysyl-L-prolyl-L-valyl-L-glutaminyL-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyL-L-methionyl-L-phenylalanyl-L-tyrosyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 95: PN: WO0023463 SEQID: 15 claimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 12

PATENT ANNOTATIONS (PNTE):

Sequence |Patent
Source |Reference

=====+=====

Not Given|WO2000023463
|claimed SEQID
|15

SEQ 1 KPVQYWTQMF YT

===== ==

HITS AT: 1-12

SEQ3 1 Lys-Pro-Val-Gln-Tyr-Trp-Thr-Gln-Met-Phe-

=== === === === ===

11 Tyr-Thr

=== ===

HITS AT: 1-12

MF C77 H106 N16 O19 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CPlus document type: Patent

RL.P Roles from patents: ANST (Analytical study); PREP (Preparation); PROC
(Process); PRP (Properties); USES (Uses)

Ring System Data

Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C4N	NC4	5	C4N	16.136.1	1
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

Absolute stereochemistry.

Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	1925.1+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.344+/-0.06 g/cm**3	760 Torr	(1)
Enthalpy of Vap. (HVAP)	331.62+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	1118.1+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	52		(1)
H acceptors (HAC)	35		(1)
H donors (HD)	24		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	59		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-2.97	pH 1 25 deg C	(1)
LOGD (LOGD)	-2.86	pH 2 25 deg C	(1)
LOGD (LOGD)	-2.60	pH 3 25 deg C	(1)
LOGD (LOGD)	-2.37	pH 4 25 deg C	(1)
LOGD (LOGD)	-2.33	pH 5 25 deg C	(1)
LOGD (LOGD)	-2.29	pH 6 25 deg C	(1)
LOGD (LOGD)	-2.09	pH 7 25 deg C	(1)
LOGD (LOGD)	-1.62	pH 8 25 deg C	(1)
LOGD (LOGD)	-1.42	pH 9 25 deg C	(1)
LOGD (LOGD)	-1.99	pH 10 25 deg C	(1)
LOGP (LOGP)	1.174+/-1.029	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	1000 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	220 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	22 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	2.4 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.40 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.24 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.0 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.24 g/L	Unbuffered Water	(1)
		pH 8.82	

Molar Intrinsic Solubility (ISLB.MOL)	0.63 mol/L	25 deg C	
Molar Solubility (SLB.MOL)	0.63 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.63 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.63 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.63 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.14 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.014 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0015 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00025 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00015 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00063 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00015 mol/L	Unbuffered Water	(1)
		pH 8.82	
		25 deg C	
Molar Volume (MVOL)	1184.2+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	1591.83		(1)
PKA (PKA)	3.21+/-0.10	Most Acidic	(1)
		25 deg C	
PKA (PKA)	10.49+/-0.10	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	608.84 A**2		(1)
Vapor Pressure (VP)	0 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14 ((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
 TI Fluorescent dye binding peptides
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13
 ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides				

find use in a variety of methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide

IT Amino acids, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Fluorescent dye binding peptides containing; fluorescent dye binding peptides)

IT Peptides, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Fluorescent dye binding; fluorescent dye binding peptides)

IT Proteins
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Fluorescent dye containing; fluorescent dye binding peptides)

IT Aptamers
 (Peptide; fluorescent dye binding peptides)

IT Dissociation
 Emission spectra
 Fluorescence
 Fluorescent dyes
 Fluorescent substances
 Protein sequences
 (fluorescent dye binding peptides)

IT 265979-68-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Fluorescent dye complex with; fluorescent dye binding peptides)

IT 198139-49-ODP, peptide complex with
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Oregon Green 514; fluorescent dye binding peptides)

IT 2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (fluorescent dye binding peptides)

IT 700964-14-3 700964-15-4 700964-17-6 700964-18-7
 RL: PRP (Properties)
 (unclaimed nucleotide sequence; fluorescent dye binding peptides)

IT 700964-05-2 700964-06-3 700964-07-4 700964-08-5 700964-09-6
 700964-10-9 700964-11-0 700964-12-1 700964-13-2 700964-16-5
 700964-19-8 700964-20-1 700964-21-2 700964-22-3 700964-23-4
 700964-24-5 700964-25-6 700964-26-7 700964-27-8 700964-28-9
 700964-29-0 700964-30-3 700964-31-4 700964-32-5 700964-33-6
 700964-34-7 700964-35-8 700964-36-9
 RL: PRP (Properties)
 (unclaimed protein sequence; fluorescent dye binding peptides)

IT 47070-99-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
 206750-67-6 211555-82-7 245759-07-3 246862-96-4 246862-97-5
 246862-98-6 246862-99-7 246863-00-3 246863-03-6 246863-04-7
 246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
 265979-53-1 265979-54-2 265979-55-3 265979-56-4 265979-58-6
 265979-59-7 265979-60-0 265979-61-1 265979-62-2 265979-63-3
 265979-64-4 265979-65-5 265979-66-6 265979-69-9 265979-70-2
 265979-71-3 265979-72-4 265979-73-5 265979-74-6 265979-75-7
 265979-76-8 265979-77-9 265979-78-0 265979-79-1 265979-81-5
 265979-82-6 265979-83-7 265979-84-8 265979-85-9 265979-86-0
 265979-87-1 265979-88-2 265979-89-3 265979-90-6 265979-92-8
 265979-93-9 265979-94-0 265979-95-1 265979-96-2 265979-97-3
 265979-98-4 265979-99-5 265980-00-5 265980-01-6 265980-02-7
 265980-03-8 265980-04-9 265980-05-0 265980-07-2 629618-70-8
 700846-44-2 700846-45-3 700846-46-4 700846-47-5 700846-48-6
 700846-49-7 700846-50-0 700846-51-1 700846-52-2 700846-54-4
 700846-55-5 700846-56-6 700846-65-7 700846-67-9
 RL: PRP (Properties)
 (unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

REFERENCE 2

AN 132:319524 CA
TI Fluorescent dye binding peptides for the determination of biomolecules
IN Nolan, Garry P.; Rozinov, Michael N.
PA The Board of Trustees of the Leland Stanford Junior University, USA
SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K007-08
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 3

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015
	WO 2000023463	A3	20000817		
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI US 1998-104465P 19981016

AB The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. Peptides are selected from phage display libraries using the immobilized fluorophores. Fluorophores are selected from the group of Texas Red, Rhodamine Red, Oregon Green 514, and fluorescein. The peptides find use in a variety of methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide fluorette phage library

IT Cytometry
(FACS (fluorescence-activated cell sorting); fluorescent dye binding peptides for determination of biomols.)

IT Resonance energy
(fluorescence, transfer, FRET; fluorescent dye binding peptides for determination of biomols.)

IT Biochemical molecules
Fluorescent dyes
Fluorometry
Genetic methods
Immobilization, biochemical
Phage display library
(fluorescent dye binding peptides for determination of biomols.)

IT Peptides, uses
RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)
(fluorescent dye binding peptides for determination of biomols.)

IT 2321-07-5 82354-19-6, Texas Red 99752-92-8, Rhodamine Red 178623-12-6 198139-49-0 265317-17-7 265317-40-6 265317-46-2 265317-48-4
265317-76-8 265317-77-9 265317-78-0 265317-89-3 265979-53-1
265979-54-2 265979-55-3 265979-56-4 265979-58-6 265979-59-7
265979-60-0 265979-61-1 265979-62-2 265979-63-3 265979-64-4
265979-65-5 265979-66-6 265979-67-7 265979-68-8 265979-69-9
265979-70-2 265979-71-3 265979-72-4 265979-73-5 265979-74-6
265979-75-7 265979-76-8 265979-77-9 265979-78-0 265979-79-1
265979-80-4 265979-81-5 265979-82-6 265979-83-7 265979-84-8
265979-85-9 265979-86-0 265979-87-1 265979-88-2 265979-89-3
265979-90-6 265979-91-7 265979-92-8 265979-93-9 265980-00-5
265980-01-6 265980-02-7 265980-03-8 265980-04-9 265980-05-0
265980-06-1 265981-56-4
RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process); USES (Uses)
(fluorescent dye binding peptides for determination of biomols.)

IT 266300-29-2 266300-30-5 266300-31-6 266300-32-7 266300-33-8
266300-34-9
RL: PRP (Properties)
(unclaimed nucleotide sequence; fluorescent dye binding peptides for determination of biomols.)

IT 47070-99-5 160612-18-0 247035-66-1 247035-86-5 247037-84-9
247037-91-8 247038-72-8 247078-49-5 250640-07-4 265980-07-2
266309-30-2 266309-33-5 266309-60-8 266310-02-5
RL: PRP (Properties)
(unclaimed protein sequence; fluorescent dye binding peptides for determination of biomols.)

IT 7361-43-5 95088-49-6 110579-95-8 113965-79-0, 6-11-Peptide (hydra head-activator) 115084-19-0 119766-62-0 130094-09-6 135941-52-5
206750-67-6 211555-82-7 246862-96-4 246862-97-5 246862-98-6
246862-99-7 246863-00-3 246863-01-4 246863-03-6 246863-04-7
246863-05-8 246863-06-9 246863-07-0 246863-08-1 260055-30-9
265979-94-0 265979-95-1 265979-96-2 265979-97-3 265979-98-4
265979-99-5 265980-08-3 266680-72-2
RL: PRP (Properties)
(unclaimed sequence; fluorescent dye binding peptides for determination of biomols.)

L1 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2007 ACS on STN
RN 265979-53-1 REGISTRY
ED Entered STN: 22 May 2000
CN L-Serine, L-lysyl-L-histidyl-L-valyl-L-glutaminyl-L-tyrosyl-L-tryptophyl-L-threonyl-L-glutaminyl-L-methionyl-L-phenylalanyl-L-tyrosyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 116: PN: US6747135 SEQID: 1 unclaimed sequence

CN 81: PN: WO0023463 SEQID: 1 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 12

PATENT ANNOTATIONS (PNTE):

Sequence	Patent
Source	Reference
Not Given	WO2000023463
	claimed SEQID
	1

SEQ 1 KHVQYWTQMF YS
===== ==

HITS AT: 1-12

SEQ3 1 Lys-His-Val-Gln-Tyr-Trp-Thr-Gln-Met-Phe-
==== ==
11 Tyr-Ser
==== ==

HITS AT: 1-12

MF C77 H104 N18 O19 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

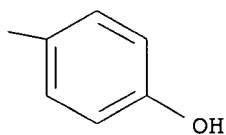
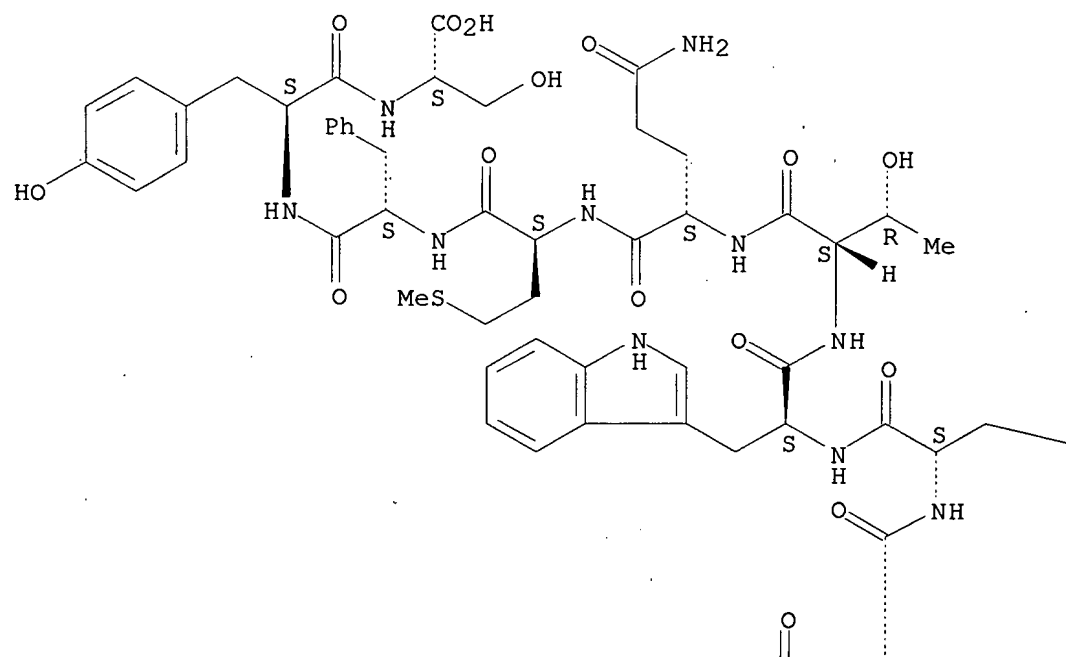
DT.CA CAPLUS document type: Patent

RL.P Roles from patents: ANST (Analytical study); PROC (Process); PRP
(Properties); USES (Uses)

Ring System Data

Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C3N2	NCNC2	5	C3N2	16.195.24	1
C6	C6	6	C6	46.150.18	3
C4N-C6	NC4-C6	5-6	C8N	333.151.57	1

Absolute stereochemistry.



PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	2015.9+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.361+/-0.06 g/cm**3	760 Torr	(1)
Enthalpy of Vap. (HVAP)	352.37+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	1173.0+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	55		(1)
H acceptors (HAC)	37		(1)
H donors (HD)	26		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	63		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-5.04	pH 1 25 deg C	(1)
LOGD (LOGD)	-4.93	pH 2 25 deg C	(1)
LOGD (LOGD)	-4.67	pH 3 25 deg C	(1)
LOGD (LOGD)	-4.44	pH 4 25 deg C	(1)

LOGD (LOGD)	-4.32	pH 5 25 deg C	(1)
LOGD (LOGD)	-3.90	pH 6 25 deg C	(1)
LOGD (LOGD)	-3.02	pH 7 25 deg C	(1)
LOGD (LOGD)	-2.51	pH 8 25 deg C	(1)
LOGD (LOGD)	-2.47	pH 9 25 deg C	(1)
LOGD (LOGD)	-3.06	pH 10 25 deg C	(1)
LOGP (LOGP)	0.105+/-1.030	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	1000 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	180 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	5.3 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.3 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.1 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	5.2 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.1 g/L	Unbuffered Water	(1)
		pH 8.62	
		25 deg C	
Molar Intrinsic Solubility (ISLB.MOL)	0.62 mol/L	25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.62 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.11 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0033 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00079 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00071 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0032 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00067 mol/L	Unbuffered Water	(1)
		pH 8.62	
		25 deg C	
Molar Volume (MVOL)	1188.3+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	1617.82		(1)
PKA (PKA)	3.23+/-0.10	Most Acidic	(1)
		25 deg C	
PKA (PKA)	10.47+/-0.10	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	646.31 A**2		(1)
Vapor Pressure (VP)	0 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.14 ((C) 1994-2007 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 141:35974 CA
 TI Fluorescent dye binding peptides
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees for the Leland Stanford Junior University, USA
 SO U.S., 54 pp., Cont.-in-part of U.S. Provisional Ser. No. 104,465.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C07K001-13
 ICS G01N033-533
 NCL 530408000
 CC 9-16 (Biochemical Methods)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6747135	B1	20040608	US 1999-419381	19991015
	US 2004176578	A1	20040909	US 2003-692151	20031014
PRAI	US 1998-104465P		19981016		
	US 1999-419381		19991015		
AB	The present invention is directed to novel polypeptides, termed fluorettes, that bind with high avidity to fluorophore dyes. The peptides find use in a variety of methods and approaches involving fluorophore dyes.				
ST	fluorescence dye binding peptide				
IT	Amino acids, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding peptides containing; fluorescent dye binding peptides)				
IT	Peptides, preparation				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye binding; fluorescent dye binding peptides)				
IT	Proteins				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye containing; fluorescent dye binding peptides)				
IT	Aptamers				
	(Peptide; fluorescent dye binding peptides)				
IT	Dissociation				
	Emission spectra Fluorescence Fluorescent dyes Fluorescent substances Protein sequences (fluorescent dye binding peptides)				
IT	265979-68-8P				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Fluorescent dye complex with; fluorescent dye binding peptides)				
IT	198139-49-ODP, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (Oregon Green 514; fluorescent dye binding peptides)				
IT	2321-07-5DP, Fluorescein, peptide complex with 82354-19-6DP, Texas Red, peptide complex with 99752-92-8DP, Rhodamine Red, peptide complex with				
	RL: SPN (Synthetic preparation); PREP (Preparation) (fluorescent dye binding peptides)				
IT	700964-14-3	700964-15-4	700964-17-6	700964-18-7	
	RL: PRP (Properties) (unclaimed nucleotide sequence; fluorescent dye binding peptides)				
IT	700964-05-2	700964-06-3	700964-07-4	700964-08-5	700964-09-6
	700964-10-9	700964-11-0	700964-12-1	700964-13-2	700964-16-5
	700964-19-8	700964-20-1	700964-21-2	700964-22-3	700964-23-4
	700964-24-5	700964-25-6	700964-26-7	700964-27-8	700964-28-9
	700964-29-0	700964-30-3	700964-31-4	700964-32-5	700964-33-6
	700964-34-7	700964-35-8	700964-36-9		
	RL: PRP (Properties)				

(unclaimed protein sequence; fluorescent dye binding peptides)

IT	47070-99-5	95088-49-6	110579-95-8	113965-79-0,	6-11-Peptide (hydra head-activator)
	115084-19-0	119766-62-0	130094-09-6	135941-52-5	
	206750-67-6	211555-82-7	245759-07-3	246862-96-4	246862-97-5
	246862-98-6	246862-99-7	246863-00-3	246863-03-6	246863-04-7
	246863-05-8	246863-06-9	246863-07-0	246863-08-1	260055-30-9
	265979-53-1	265979-54-2	265979-55-3	265979-56-4	265979-58-6
	265979-59-7	265979-60-0	265979-61-1	265979-62-2	265979-63-3
	265979-64-4	265979-65-5	265979-66-6	265979-69-9	265979-70-2
	265979-71-3	265979-72-4	265979-73-5	265979-74-6	265979-75-7
	265979-76-8	265979-77-9	265979-78-0	265979-79-1	265979-81-5
	265979-82-6	265979-83-7	265979-84-8	265979-85-9	265979-86-0
	265979-87-1	265979-88-2	265979-89-3	265979-90-6	265979-92-8
	265979-93-9	265979-94-0	265979-95-1	265979-96-2	265979-97-3
	265979-98-4	265979-99-5	265980-00-5	265980-01-6	265980-02-7
	265980-03-8	265980-04-9	265980-05-0	265980-07-2	629618-70-8
	700846-44-2	700846-45-3	700846-46-4	700846-47-5	700846-48-6
	700846-49-7	700846-50-0	700846-51-1	700846-52-2	700846-54-4
	700846-55-5	700846-56-6	700846-65-7	700846-67-9	

RL: PRP (Properties)

(unclaimed sequence; fluorescent dye binding peptides)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Aldwin; US 5491074 A 1996 CAPLUS
- (2) Cull, M; Proc Natl Acad Sci U S A 1992, V89, P1865 CAPLUS
- (3) Cwirla, S; Proc Natl Acad Sci U S A 1990, V87, P6378 CAPLUS
- (4) Devlin, J; Science 1990, V249, P404 CAPLUS
- (5) Hanes, J; Proc Natl Acad Sci U S A 1997, V94, P4937 CAPLUS
- (6) Harrison, J; Methods Enzymol 1996, V267, P83 CAPLUS
- (7) Katz, B; Biochemistry 1995, V34, P15421 CAPLUS
- (8) Koivunen, E; Biotechnology 1995, V13, P265 CAPLUS
- (9) Mattheakis, L; Proc Natl Acad Sci U S A 1994, V91, P9022 CAPLUS
- (10) Matthews, D; Science 1993, V260, P1113 CAPLUS
- (11) Nolan, G; Proc Natl Acad Sci U S S N No S A 1988, V85, P2603 CAPLUS
- (12) Oldenburg, K; Proc Natl Acad Sci U S A 1992, V89, P5393 CAPLUS
- (13) Rebar, E; Methods Enzymol 1996, V267, P129 CAPLUS
- (14) Rebar, E; Science 1994, V263, P671 CAPLUS
- (15) Roberts, R; Proc Natl Acad Sci U S A 1997, V94, P12297 CAPLUS
- (16) Saggio, I; Biochem J 1993, V293, P613 CAPLUS
- (17) Schatz, P; Biotechnology 1993, V11, P1138 CAPLUS
- (18) Schatz, P; Methods Enzymol 1996, V267, P171 CAPLUS
- (19) Scott, J; Proc Natl Acad Sci U S A 1992, V89, P5398 CAPLUS
- (20) Scott, J; Science 1990, V249, P386 CAPLUS
- (21) Smith, G; Science 1985, V228, P1315 MEDLINE
- (22) Wennermers; Tetrahedron Letters 1994, P6413
- (23) Yu, J; Methods Enzymol 1996, V267, P3 CAPLUS

REFERENCE 2

AN 132:319524 CA
 TI Fluorescent dye binding peptides for the determination of biomolecules
 IN Nolan, Garry P.; Rozinov, Michael N.
 PA The Board of Trustees of the Leland Stanford Junior University, USA
 SO PCT Int. Appl., 64 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C07K007-08
 CC 9-16 (Biochemical Methods)
 Section cross-reference(s): 3

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000023463	A2	20000427	WO 1999-US24266	19991015

WO 2000023463 A3 20000817

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1998-104465P 19981016

AB The present invention is directed to novel polypeptides, termed
fluorettes, that bind with high avidity to fluorophore dyes. Peptides are
selected from phage display libraries using the immobilized fluorophores.
Fluorophores are selected from the group of Texas Red, Rhodamine Red,
Oregon Green 514, and fluorescein. The peptides find use in a variety of
methods and approaches involving fluorophore dyes.

ST fluorescence dye binding peptide fluorett phage library

IT Cytometry

(FACS (fluorescence-activated cell sorting); fluorescent dye binding
peptides for determination of biomols.)

IT Resonance energy

(fluorescence, transfer, FRET; fluorescent dye binding peptides for
determination of biomols.)

IT Biochemical molecules

Fluorescent dyes

Fluorometry

Genetic methods

Immobilization, biochemical

Phage display library

(fluorescent dye binding peptides for determination of biomols.)

IT Peptides, uses

RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical
process); PRP (Properties); ANST (Analytical study); PROC (Process); USES
(Uses)

(fluorescent dye binding peptides for determination of biomols.)

IT 2321-07-5 82354-19-6, Texas Red 99752-92-8, Rhodamine Red 178623-12-
6 198139-49-0 265317-17-7 265317-40-6 265317-46-2 265317-48-4

265317-76-8 265317-77-9 265317-78-0 265317-89-3 265979-53-1

265979-54-2 265979-55-3 265979-56-4 265979-58-6 265979-59-7

265979-60-0 265979-61-1 265979-62-2 265979-63-3 265979-64-4

265979-65-5 265979-66-6 265979-67-7 265979-68-8 265979-69-9

265979-70-2 265979-71-3 265979-72-4 265979-73-5 265979-74-6

265979-75-7 265979-76-8 265979-77-9 265979-78-0 265979-79-1

265979-80-4 265979-81-5 265979-82-6 265979-83-7 265979-84-8

265979-85-9 265979-86-0 265979-87-1 265979-88-2 265979-89-3

265979-90-6 265979-91-7 265979-92-8 265979-93-9 265980-00-5

265980-01-6 265980-02-7 265980-03-8 265980-04-9 265980-05-0

265980-06-1 265981-56-4

RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical
process); PRP (Properties); ANST (Analytical study); PROC (Process); USES
(Uses)

(fluorescent dye binding peptides for determination of biomols.)

IT 266300-29-2 266300-30-5 266300-31-6 266300-32-7 266300-33-8
266300-34-9

RL: PRP (Properties)

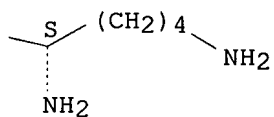
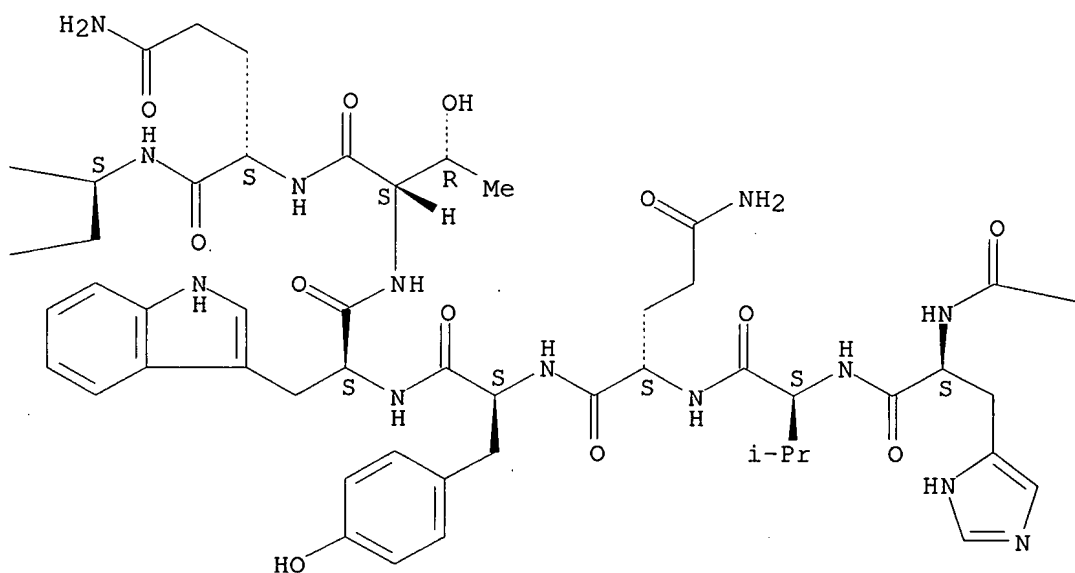
(unclaimed nucleotide sequence; fluorescent dye binding peptides for
determination of biomols.)

IT 47070-99-5 160612-18-0 247035-66-1 247035-86-5 247037-84-9
247037-91-8 247038-72-8 247078-49-5 250640-07-4 265980-07-2

266309-30-2 266309-33-5 266309-60-8 266310-02-5

RL: PRP (Properties)

(unclaimed protein sequence; fluorescent dye binding peptides for
determination



```
=> s texas red and (fluorette or peptide)
      14771 TEXAS
      416707 RED
        519 REDS
      416969 RED
          (RED OR REDS)
      1310 TEXAS RED
          (TEXAS (W) RED)
        4 FLUORETTE
        3 FLUORETTES
        5 FLUORETTE
          (FLUORETTE OR FLUORETTES)
      378033 PEPTIDE
      276979 PEPTIDES
      484208 PEPTIDE
          (PEPTIDE OR PEPTIDES)
```

L3 207 TEXAS RED AND (FLUORETTE OR PEPTIDE)

=> s l3 and fluorette

4 FLUORETTE

3 FLUORETTES

5 FLUORETTE

(FLUORETTE OR FLUORETTES)

L4 3 L3 AND FLUORETTE

=> s l4 not l2

L5 1 L4 NOT L2

=> d l5 ibib abs hitstr tot

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:802926 CAPLUS

DOCUMENT NUMBER: 130:165114

TITLE: Evolution of peptides that modulate the
spectral qualities of bound, small-molecule
fluorophores

AUTHOR(S): Rozinov, Michael N.; Nolan, Garry P.

CORPORATE SOURCE: Department of Molecular Pharmacology, Stanford
University Medical Center, Stanford, CA, 94305-5332,
USA

SOURCE: Chemistry & Biology (1998), 5(12), 713-728

CODEN: CBOLE2; ISSN: 1074-5521

PUBLISHER: Current Biology Publications

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fluorophore dyes are used extensively in biomedical research to sensitively assay cellular constituents and physiol. We have created, as proof of principle, fluorophore dye binding peptides that could have applications in fluorescent dye-based approaches in vitro and in vivo. A panel of Texas red, Rhodamine red, Oregon green 514 and fluorescein binding peptides, termed here "fluorettes", was selected via biopanning of a combinatorial library of 12-mer peptides fused to a minor coat pIII protein of the filamentous bacteriophage M13. The "best" fluorette sequences from each of the groups were subjected to further mutagenesis, followed by a second biopanning to select a new generation of improved fluorettes. Phage were selected that had higher avidity for each fluorophore except Rhodamine red. Of these, peptides were characterized that could specifically and with high affinity bind at least one dye, Texas red, in solution. In addition, the binding of certain peptides to Texas red shifted the peak excitation and/or the emission spectra of the bound dye. Peptides in the context of phage display could readily be selected that could bind to small-mol. fluorophores. The affinities of selected mutant fluorettes could be increased by mutation and further selection. Only a subset of the free peptides could bind free dyes in solution, suggesting that phage context contributed to the selection and ability of certain peptidic regions to independently bind the dyes. Future screens might lead to the creation of other dye-binding peptides with novel characteristics or Texas red derivs. with crosslinking substituents might be designed to increase the utility of the system.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST	30.13	270.18
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
	-2.34	-10.37

STN INTERNATIONAL LOGOFF AT 08:51:09 ON 19 SEP 2007

Distance tree of results ^{NEW}

Sequences producing significant alignments:		Score (Bits)	E Value
gi 78127855 gb ABB22239.1 	thymidine kinase-like protein [Ovine	29.5	25
gi 83642858 ref YP_438145.1 	ORF21 [Ovine herpesvirus 2] >gi ...	29.5	25
gi 146296177 ref YP_001179948.1 	Allergen V5/Tpx-1 family pro...	28.6	46
gi 66804519 ref XP_635992.1 	hypothetical protein DDBDRAFT_01...	28.6	46
gi 60681778 ref YP_211922.1 	hypothetical protein BF2300 [Bac...	28.2	61
gi 15614366 ref NP_242669.1 	hypothetical protein BH1803 [Bac...	28.2	61
gi 89097516 ref ZP_01170405.1 	hypothetical protein B14911_27...	28.2	61
gi 153940849 ref YP_001391336.1 	SCP-like extracellular prote...	27.8	82
gi 149181592 ref ZP_01860086.1 	hypothetical protein BSG1_137...	27.8	82
gi 149179719 ref ZP_01858224.1 	hypothetical protein BSG1_018...	27.8	82
gi 149182265 ref ZP_01860745.1 	hypothetical protein BSG1_199...	27.8	82
gi 148379973 ref YP_001254514.1 	exported protein [Clostridiu...	27.8	82
gi 126651239 ref ZP_01723449.1 	hypothetical protein BB14905_...	27.8	82
gi 28211946 ref NP_782890.1 	transporter [Clostridium tetani ...	27.8	82
gi 13507984 ref NP_109933.1 	peptide deformylase [Mycoplasma ...	27.8	82
gi 23098322 ref NP_691788.1 	hypothetical protein OB0867 [Oce...	27.8	82
gi 89097558 ref ZP_01170447.1 	hypothetical protein B14911_28...	27.8	82
gi 89097846 ref ZP_01170733.1 	Ykwd [Bacillus sp. NRRL B-1491...	27.8	82
gi 125972821 ref YP_001036731.1 	Allergen V5/Tpx-1 related [C...	27.8	82
gi 120435753 ref YP_861439.1 	cbb3-type cytochrome c oxidase ...	27.4	110
gi 69935869 ref ZP_00630756.1 	conserved hypothetical protein...	27.4	110
gi 46139389 ref XP_391385.1 	hypothetical protein FG11209.1 [Gib	27.4	110
gi 156866610 gb EDO59982.1 	hypothetical protein CLOLEP_02799 [C	26.9	148
gi 83643746 ref YP_432181.1 	predicted membrane protein [Hahe...	26.9	148
gi 157353561 emb CAO46078.1 	unnamed protein product [Vitis vini	26.5	198
gi 118729670 ref ZP_01578187.1 	glucose sorbosone dehydrogena...	26.5	198
gi 71282430 ref YP_269817.1 	hypothetical protein CPS_3120 [C...	26.5	198
gi 58617024 ref YP_196223.1 	thiamine biosynthesis protein Th...	26.5	198
gi 57239026 ref YP_180162.1 	thiamine biosynthesis protein Th...	26.5	198
gi 27377860 ref NP_769389.1 	probable C4-dicarboxylate-bindin...	26.5	198
gi 145580745 gb ABP87526.1 	NADH dehydrogenase subunit 2 [Ano...	26.1	266
gi 153893299 ref ZP_02014054.1 	hypothetical protein ObacDRAF...	26.1	266
gi 116073638 ref ZP_01470900.1 	hypothetical protein RS9916_3...	26.1	266
gi 155368551 emb CAM98568.1 	NADH4 protein [Ailuropoda melanoleu	25.7	356
gi 151942736 gb EDN61082.1 	multidrug transporter [Saccharomyces	25.7	356
gi 154298124 ref XP_001549486.1 	hypothetical protein BC1G_12...	25.7	356
gi 148298641 ref YP_001249293.1 	NADH dehydrogenase subunit 4...	25.7	356
gi 145517869 ref XP_001444812.1 	hypothetical protein [Parame...	25.7	356
gi 119859347 ref ZP_01640763.1 	peptidase S9, prolyl oligopep...	25.7	356
gi 116668578 ref YP_829511.1 	glycosyl transferase, family 2 ...	25.7	356
gi 115494701 ref YP_778730.1 	NADH dehydrogenase subunit 4 [P...	25.7	356
gi 111064208 gb EAT85328.1 	hypothetical protein SNOG_07862 [Pha	25.7	356
gi 111061930 gb EAT83050.1 	hypothetical protein SNOG_09785 [Pha	25.7	356
gi 121607211 ref YP_995018.1 	Histidinol dehydrogenase [Vermi...	25.7	356
gi 89145491 gb ABD61942.1 	ORF1 [Torque teno virus]	25.7	356
gi 104774160 ref YP_619140.1 	DNA topoisomerase I [Lactobacil...	25.7	356
gi 90416311 ref ZP_01224243.1 	probable lipoprotein signal pe...	25.7	356

>gi|78127855|gb|ABB22239.1| thymidine kinase-like protein [Ovine herpesvirus 2]
Length=569

Score = 29.5 bits (62), Expect = 25
Identities = 7/9 (77%), Positives = 9/9 (100%), Gaps = 0/9 (0%)

Query 2 PVQYWTQMF 10
PVQYWTQ++
Sbjct 280 PVQYWTQVY 288

>gi|83642858|ref|YP_438145.1| ORF21 [Ovine herpesvirus 2]
gi|61970972|gb|AA58057.1| ORF21 [Ovine herpesvirus 2]
Length=569

Score = 29.5 bits (62), Expect = 25
Identities = 7/9 (77%), Positives = 9/9 (100%), Gaps = 0/9 (0%)

Query 2 PVQYWTQMF 10
PVQYWTQ++
Sbjct 280 PVQYWTQVY 288

>gi|146296177|ref|YP_001179948.1| **G** Allergen V5/Tpx-1 family protein [Caldicellu
DSM 8903]

gi|145409753|gb|ABP66757.1| **G** Allergen V5/Tpx-1 family protein [Caldicellulosir
DSM 8903]
Length=203

Score = 28.6 bits (60), Expect = 46
Identities = 7/8 (87%), Positives = 7/8 (87%), Gaps = 0/8 (0%)

Query 3 VQYWTQMF 10
V YWTQMF
Sbjct 192 VLYWTQMF 199

>gi|66804519|ref|XP_635992.1| **G** hypothetical protein DDBDRAFT_0188654 [Dictyostel
AX4]

gi|60464332|gb|EAL62481.1| **G** hypothetical protein DDBDRAFT_0188654 [Dictyosteliu
AX4]
Length=871

Score = 28.6 bits (60), Expect = 46
Identities = 6/8 (75%), Positives = 7/8 (87%), Gaps = 0/8 (0%)

Query 4 QYWTQMFY 11
QYW +MFY
Sbjct 247 QYWNEMFY 254

>gi|60681778|ref|YP_211922.1| **G** hypothetical protein BF2300 [Bacteroides fragilis
gi|60493212|emb|CAH07994.1| **G** putative membrane protein [Bacteroides fragilis NC
Length=166

Score = 28.2 bits (59), Expect = 61
Identities = 8/15 (53%), Positives = 8/15 (53%), Gaps = 6/15 (40%)

Query 4 QYWTQM-----FYT 12
QYW QM FYT
Sbjct 117 QYWIQMTDKGEKFYT 131

>gi|15614366|ref|NP_242669.1| **G** hypothetical protein BH1803 [Bacillus halodurans
gi|10174421|dbj|BAB05522.1| **G** BH1803 [Bacillus halodurans C-125]
Length=207



Score = 28.2 bits (59), Expect = 61

Distance tree of results ^{NEW}

Sequences producing significant alignments:		Score (Bits)	E Value
ref NP_691788.1	hypothetical protein OB0867 [Oceanobacillus ...	29.9	19
ref YP_001179948.1	Allergen V5/Tpx-1 family protein [Caldice...	28.6	46
ref XP_635992.1	hypothetical protein DDBDRAFT_0188654 [Dicty...	28.6	46
ref NP_242669.1	hypothetical protein BH1803 [Bacillus halodu...	28.2	61
ref ZP_01170405.1	hypothetical protein B14911_27995 [Bacillu...	28.2	61
ref ZP_01170733.1	Ykwd [Bacillus sp. NRRL B-14911] >gb EAR66...	28.2	61
ref YP_001391336.1	SCP-like extracellular protein [Clostridi...	27.8	82
ref ZP_01860086.1	hypothetical protein BSG1_13771 [Bacillus ...	27.8	82
ref ZP_01858224.1	hypothetical protein BSG1_01850 [Bacillus ...	27.8	82
ref ZP_01860745.1	hypothetical protein BSG1_19909 [Bacillus ...	27.8	82
ref YP_001254514.1	exported protein [Clostridium botulinum A...	27.8	82
ref ZP_01723449.1	hypothetical protein BB14905_01215 [Bacill...	27.8	82
ref NP_782890.1	transporter [Clostridium tetani E88] >gb AAO...	27.8	82
ref NP_109933.1	peptide deformylase [Mycoplasma pneumoniae M...	27.8	82
ref ZP_01170447.1	hypothetical protein B14911_28205 [Bacillu...	27.8	82
ref YP_001036731.1	Allergen V5/Tpx-1 related [Clostridium th...	27.8	82
ref NP_899531.1	conserved hypothetical protein [Vibrio phage...	27.4	110
ref XP_391385.1	hypothetical protein FG11209.1 [Gibberella zeae	27.4	110
ref YP_432181.1	predicted membrane protein [Hahella chejuens...	26.9	148
ref XP_001638630.1	predicted protein [Nematostella vectensis...	26.5	198
ref XP_001539048.1	predicted protein [Ajellomyces capsulatus...	26.5	198
ref NP_612690.1	tegument protein UL47 [Chimpanzee cytomegalo...	26.5	198
ref YP_269817.1	hypothetical protein CPS_3120 [Colwellia psy...	26.5	198
ref NP_769389.1	probable C4-dicarboxylate-binding protein [B...	26.5	198
ref ZP_01925098.1	hypothetical protein VvadDRAFT_1379 [Victi...	26.1	266
ref ZP_01922988.1	hypothetical protein VvadDRAFT_2084 [Victi...	26.1	266
gb ABB22239.1	thymidine kinase-like protein [Ovine herpesvirus	26.1	266
ref NP_825172.1	hypothetical protein SAV3995 [Streptomyces a...	26.1	266
ref YP_438145.1	ORF21 [Ovine herpesvirus 2] >gb AAX58057.1 ...	26.1	266
gb EAL41048.3	AGAP010349-PA [Anopheles gambiae str. PEST]	25.7	356
ref XP_001600764.1	PREDICTED: similar to conserved hypotheti...	25.7	356
emb CAM98568.1	NADH4 protein [Ailuropoda melanoleuca]	25.7	356
gb EDN61082.1	multidrug transporter [Saccharomyces cerevisiae Y	25.7	356
ref YP_001249293.1	NADH dehydrogenase subunit 4 [Ailuropoda ...	25.7	356
ref ZP_01815912.1	hypothetical protein VSWAT3_15599 [Vibrion...	25.7	356
gb EAX02136.1	protein regulator of cytokinesis 1, isoform CR...	25.7	356
ref ZP_01640763.1	peptidase S9, prolyl oligopeptidase active...	25.7	356
ref YP_829511.1	glycosyl transferase, family 2 [Arthrobacter...	25.7	356
ref XP_559110.2	ENSANGP00000027759 [Anopheles gambiae str. PEST	25.7	356
ref YP_778730.1	NADH dehydrogenase subunit 4 [Phocarcos hoo...	25.7	356
ref XP_510600.2	PREDICTED: protein regulator of cytokinesis 1 [25.7	356
ref XP_623923.2	PREDICTED: similar to CG32415-PA [Apis mellifer	25.7	356
ref XP_001098763.1	PREDICTED: similar to protein regulator o...	25.7	356
ref XP_001654771.1	conserved hypothetical protein [Aedes aeg...	25.7	356
ref ZP_01224243.1	probable lipoprotein signal peptide [marin...	25.7	356


ref XP_001459504.1 	hypothetical protein [Paramecium tetraure...	24.8	642
ref XP_001433882.1 	hypothetical protein [Paramecium tetraure...	24.8	642
ref XP_001426188.1 	hypothetical protein [Paramecium tetraure...	24.8	642
ref XP_001426294.1 	hypothetical protein [Paramecium tetraure...	24.8	642
ref XP_001423712.1 	hypothetical protein [Paramecium tetraure...	24.8	642
ref XP_415358.2 	PREDICTED: similar to SBF1 protein, partial [Ga	24.8	642
gb EAU91164.1 	hypothetical protein CC1G_03332 [Coprinopsis c...	24.8	642
ref ZP_01115747.1 	predicted membrane protein [Reinekea sp. M...	24.8	642


Alignments

>[ref|NP_691788.1|](#)  hypothetical protein OB0867 [Oceanobacillus iheyensis HTE831]
[dbj|BAC12823.1|](#)  hypothetical conserved protein [Oceanobacillus iheyensis HTE83]
Length=278

Score = 29.9 bits (63), Expect = 19
Identities = 8/12 (66%), Positives = 9/12 (75%), Gaps = 3/12 (25%)


Query 2 HVQ---YWTQMF 10
HV+ YWTQMF
Sbjct 264 HVENGNYWTQMF 275


>[ref|YP_001179948.1|](#)  Allergen V5/Tpx-1 family protein [Caldicellulosiruptor sac
DSM 8903]

[gb|ABP66757.1|](#)  Allergen V5/Tpx-1 family protein [Caldicellulosiruptor saccharo
DSM 8903]
Length=203

Score = 28.6 bits (60), Expect = 46
Identities = 7/8 (87%), Positives = 7/8 (87%), Gaps = 0/8 (0%)


Query 3 VQYWTQMF 10
V YWTQMF
Sbjct 192 VLYWTQMF 199


>[ref|XP_635992.1|](#)  hypothetical protein DDBDRAFT_0188654 [Dictyostelium discoide
AX4]

[gb|EAL62481.1|](#)  hypothetical protein DDBDRAFT_0188654 [Dictyostelium discoideum
AX4]
Length=871

Score = 28.6 bits (60), Expect = 46
Identities = 6/8 (75%), Positives = 7/8 (87%), Gaps = 0/8 (0%)

Query 4 QYWTQMFY 11
QYW +MFY
Sbjct 247 QYWNEMFY 254

>[ref|NP_242669.1|](#)  hypothetical protein BH1803 [Bacillus halodurans C-125]

[dbj|BAB05522.1|](#)  BH1803 [Bacillus halodurans C-125]
Length=207

Score = 28.2 bits (59), Expect = 61
Identities = 6/7 (85%), Positives = 6/7 (85%), Gaps = 0/7 (0%)

Query 4 QYWTQMF 10
YWTQMF
Sbjct 198 HYWTQMF 204